POLYCOAT PRODUCTS
A Division of American Polymers Corp.

TABLE OF CONTENTS

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POLYCOAT PRODUCTS
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GENERAL GUIDELINES

SECTION 1: SAFETY AND STORAGE

These guidelines cover safety and storage of Polycoat Products elastomeric coatings. ***Failure to follow these guidelines can result in bodily injury or property damage.***

Polycoat Products produces three basic types of coatings. These are solvent based, 100% solids, and waterborne coatings. Each type has specific hazard potentials and storage requirements. Solvent solution coatings have hazards associated with fire, solvent toxicity and chemical toxicity. One hundred percent solids coatings have low fire risk but may require special care because of chemical toxicity. Waterborne coatings have negligible risk of fire and moderate to very low chemical toxicity. Both the contractor and workers must know the precautions necessary to protect against fire, explosive combustion and toxicity. The contractor and their employees should be familiar with the individual product labels, material safety data sheets (MSDS), product data sheets and guide specifications that describe specific hazards, content, proper use and storage recommendations.

To protect against fire, explosion and chemical toxicity it is important to provide ventilation at all times. Many coating applications are in open exterior areas where natural ventilation minimizes hazards.

Applications in confined spaces and tanks pose greater danger. Use extreme caution. Remove all ignition sources. Check atmosphere for oxygen deficiencies. Use adequate personal protective equipment. Observe precautions pertaining to confined space entry. Confined space “Entry Permit” may be required, check with OSHA, EPA and other local regulatory agencies before proceeding. When natural air movement is insufficient, as in a confined area, forced air ventilation is required. Confined areas are best ventilated by equipment that exhausts the air from near floor level, since solvent vapors are heavier than air and tend to collect in low areas. A competent, properly equipped worker must be stationed outside confined areas while work is in progress to assist in case of emergency.

FIRE AND EXPLOSION PREVENTION

Flash points are listed in material safety data sheets (MSDS) for each of Polycoat’s products containing solvent. ***The worker and foreman must know the flash point for each material being applied.*** The flash point is the lowest temperature at which a coating gives off sufficient solvent vapor to form an ignitable mixture with air. This mixture of solvent vapor and air can then be ignited by an outside source such as sparks, flame, lit cigarettes, etc.

When combustible vapor is mixed with air in certain proportions, ignition will produce an explosion.

Fire and explosion hazards are reduced to a minimum when solvent vapors are controlled. When work must be done in confined areas, solvent vapor concentrations should be routinely checked with OSHA approved equipment. Should vapor concentrations approach the lower limit, increase air ventilation and/or stop coating application until the vapor concentration is reduced to a safe level. Do not work in confined areas, even with ventilation and respirators, when concentrations of solvent vapors are above the lower explosive limit.

Open flame, welding, smoking or other ignition sources shall not be allowed in a building, overhead or near a building where coating is being applied or has been recently applied. Proper “No Smoking” and “Fire Hazard” signs shall be placed in the working and restricted areas.

All electrical equipment and outlets must be grounded. This includes switches, connectors, lights and motors. Lights must have a protective enclosure to prevent physical damage. Whenever solvent vapors are present, all electrical equipment must be explosion proof, complying with the National Electrical Code. It is the responsibility of the contractor to verify that these precautions are in place.

Any equipment, such as spray guns and compressed air nozzles, which can produce a static charge, must be grounded.

All hand tools used in solvent vapor areas must be of non-sparking construction. When non-compliant tools must be used, remove equipment to an area free of solvent vapor and/or exhaust solvent laden air thoroughly before beginning work.

Work clothes must be of a material such as cotton, which does not generate static charges. Beware of synthetic materials. Shoes should not have metal sole plates since these cause sparking.

Have fire extinguishers as prescribed by NFPA, the Fire Department, and/or OSHA within easy access of work areas where solvented coatings are being applied. Check with NFPA and local fire regulations for proper extinguishers.

Ventilation shall be provided to coated areas not only during application but also for sufficient time after to ensure complete evaporation of solvents.

One person must be assigned at all times the clear responsibility to look for and turn off any equipment that could cause ignition of solvent vapors. This includes pilot lights, switches, electric spark starters, and motors. Workers must lock switches to prevent accidental operation when solvent vapors are present.

Mixing of materials must be done in a well ventilated area.

TOXICITY AND HEALTH CONSIDERATIONS

Isocyanates may cause allergic skin or respiratory reactions. ***Individuals with chronic respiratory problems or prior respiratory reactions to such material should not be exposed to vapors.*** All personnel in the application area must wear OSHA approved air respirators where an airborne concentration of isocyanate vapors is expected to exceed the threshold limit value (TLV) or if the concentration levels are unknown. For emergencies, use a positive pressure self-contained breathing apparatus. Cartridge type respirators are not approved for protection against isocyanates because they have poor warning properties since the odor at which isocyanate can be smelled is substantially higher than the exposure limits. Use explosion-proof, suction type, ventilation equipment (exhaust fans and blowers) with sufficient cfm capacity to keep isocyanate vapors below the TLV limit.

Caution! Air circulation and exhaustion of isocyanate vapors must be maintained until the coatings have fully cured to ensure that no potential fire, explosion or health hazard remains. Warning symptoms (irritation of the eyes, nose and throat or odor) are not adequate to prevent chronic overexposure from inhalation. This material can produce asthmatic sensitization upon even a single inhalation or upon repeated inhalation exposures to lower concentrations. Exposure to vapors of heated isocyanates can be extremely dangerous. Employee education and training in safe handling of this material is required under OSHA Hazard Communication Standard.

Portable air sampling equipment is available to measure the content of some solvents in the air. Workers and foreman must be certain that measurements of this type are being made when people are working in an enclosed area.

When solvent vapor is present, an approved fresh air supplied, respirator with an approved source of respirable air must be used for protection. The use of a fresh air supplied respirator does not reduce the necessity for good ventilation, as this is still needed to lessen fire hazards and ensure proper drying of coatings.

Any time a worker begins to feel discomfort or irritation to the eyes, nose or throat, the concentration of solvent vapor is too high for steady exposure. If a person feels light-headed, giddy, dizzy or exhilarated, the solvent vapor concentration is too high and must be reduced by improved ventilation. ***Any persons so affected must go to an area of fresh air.***

The effectiveness of ventilation depends on the physical barriers, which restrict airflow. Open exterior areas on roofs or decks ventilate normally by natural air movement. Confined areas in rooms, tanks and some pit or pond areas, as well as roofs or decks surrounded by walls or high parapets require forced air ventilation.

Solvents may cause allergic skin or respiratory reactions. Immediate effect is stupor (central nervous system depression). Individuals with chronic respiratory problems or prior respiratory reactions to such materials should not be exposed to vapors.

The application method of using an airless sprayer will cause the same volume of product to produce higher airborne vapor concentrations in a shorter period of time than other application methods. It is important that air is monitored and full precautions are taken as indicated above.

First Aid: In case of skin contact, remove contaminated clothing as needed and immediately wash off with plenty of water and mild soap for at least 15 minutes.

If medical attention is required, have label and material safety data sheet (MSDS) available for physician.

For industrial use by professional applicators only. Not intended for sale to the general public. Not to be sold or delivered to a minor. ***Keep out of the reach of children.***

HEALTH & SAFETY PRECAUTIONS

The uncured components of these products can cause irritation to the eyes, skin, mucous membranes and respiratory tract, and are harmful if swallowed. Avoid contact with eyes and skin, especially open cuts. Wear protective clothing, chemical resistant rubber gloves, chemical tight goggles, protective barrier cream, etc. to prevent contact with material. Wash hands with soap and water before eating, drinking, smoking, applying cosmetics, or using the toilet facilities. Launder contaminated clothing and footwear before reuse. Air dry contaminated clothing in a well ventilated area before laundering. Discard unwashable contaminated shoes and clothing. Safety shower and eye wash stations should be available. Educate and train employees in the safe use of this product. Untrained persons must not be allowed in or around work area unsupervised and without proper safety and respiratory equipment.

Prior to beginning any project, the health and safety of building occupants and people in adjacent areas and buildings should be considered. Vapors are heavier than air and can travel considerable distances. Take care to protect these people by posting signs, sealing off buildings from infiltration of odors and fumes by turning off air intake, vacating the building or using other appropriate measures. Precautions should continue until coatings have completely cured and no residual odor remains.

These products may contain chemicals which the State of California lists as causing cancer, birth defects, or other reproductive harm (Proposition 65).

OTHER SAFETY CONSIDERATIONS

Footwear must be a safety shoe with steel toe for protection. Fifty-five gallon drums of coating are very heavy and can cause considerable damage if set on an unprotected foot. The sole should be of a soft, resilient material to give the best traction without damaging coated areas.

Use extreme caution when working on sloped areas. Use lifelines. Wet coatings are very slippery.

When working in bright sun with light colored coating, wear dark glasses to prevent glare blindness.

PROPERTY PRECAUTIONS

Consider possible damage to property. Overspray can ruin finishes on autos and other surfaces (brick, paint, plastic, etc.). Solvent vapors in confined areas can be harmful to plants and pets. Foods, even those stored in freezers, can pick up a solvent taste and should be protected from vapors.

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STORAGE
Moisture reacts with isocyanates to produce carbon dioxide. Do not breathe the vapors. Store in tightly closed containers to prevent moisture contamination.

Keep product in a cool, dry, ventilated storage area, in closed containers and out of direct sunlight. Store in containers above ground and surrounded by dikes to contain spills or leaks.

All material should be stored in a cool, shaded place, preferably at a temperature of 65°F (18°C). Higher storage temperatures for extended periods can cause thickening and even gelation of elastomeric coatings.

When opening containers, check them first for any signs of expansion, which can occur due to pressure build up resulting from moisture reaction. Open containers carefully, pointing them away from face and body to prevent expulsion of material.

Whenever work is stopped for the day, all coatings and thinners should be stored in tightly sealed factory containers to minimize evaporation and fire hazard. Materials left on unsupervised job sites may attract the curious or the malicious. Protect your materials properly and avoid potential harm to others.

Do not keep open containers in confined places.

Protect water based emulsion coatings from freezing.

Containers, even those that have been emptied, may contain dangerous and explosive vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers. Do not pressurize containers to empty them. In the event that thinners and/or solvents are used for clean up or dilution, consult the material safety data sheet (MSDS) for that particular product for additional health and safety information.

The above information is based on standard industrial practices and is meant to outline the hazards, and is not necessarily all-inclusive. Common sense and care in evaluating the possibility of hazards is essential.

Nothing contained herein should supersede local laws, codes, ordinances or regulations.

The standards and regulations published by the Occupational Safety and Health Administration (OSHA), U.S. Department of Labor, EPA and local statutory authorities, where applicable, should be consulted for further detail and compliance.

CONFINED SPACES AND TANKS
This type of application poses greater dangers. Use extreme caution. Isolate, vent, drain, wash and purge systems or equipment before maintenance or repair. Remove all ignition sources. Check atmosphere for explosiveness and oxygen deficiencies. Use adequate personal protective equipment. Observe precautions pertaining to confined space entry.

Confined space "Entry Permit" may be required, check with OSHA, EPA and other local regulatory agencies before proceeding.

SECTION 2: JOB CONDITIONS

Construction work such as expansion joints, control joints, drains, ducts and other penetrations should be complete prior to the coating application.

Surfaces must be thoroughly dry to ensure adhesion of all primers and coatings. When in doubt, test for moisture with a moisture meter or 16-hour mat test (ASTM D-4263).

Dirt or dust that settles on surfaces before start of work or between coats must be removed.

Surface and ambient temperature are very important to optimize curing. Ice, frost or condensation may be present on surfaces less than 50°F (10°C). Application of some coatings can be done at lower temperatures provided the surface is free of moisture. The ideal conditions for curing are 70°F (21°C) ambient temperature and 50% relative humidity. Do not apply products when the ambient or substrate temperature is rising. See temperature limitations listed in product data sheets.

Job specifications require that surfaces be accepted by the coating applicator prior to start of work. Substrates which are not structurally sound or which do not meet the specification requirements for surface finish or condition should not be accepted. Correction of surface defects is the general contractor's responsibility. Review of specification requirements with the general contractor before the substrate is constructed will minimize problems at the time of acceptance.

Any optional adhesion test is to be performed seven days after product application.

SURFACE PREPARATION
Concrete or plywood substrates must be free of all contamination that may impair proper bonding. Substrates must be sloped a minimum of ¼" per foot for drainage, and must be primed with the applicable primer prior to application of the membrane and surface protection materials.

Concrete: The surface of concrete substrates must be clean and free of standing water. All holes, joints and cracks must be pointed flush with portland cement mortar and all high spots cut or ground off to provide a smooth, even surface.

Before the material is applied, the substrate must be clean and free of dust or foreign material. Paint, grease and oil must be removed either by grinding or sandblasting and concrete surfaces must be shotblasted or water blasted. Control joints should be cut per standard concrete construction practices and caulked.

Concrete must exhibit 3000-psi minimum. Concrete surfaces to be coated must be trowel finished in compliance with the American Concrete Institute (except that hand troweling is not required), followed by a fine hair brooming, left free of loose particles, and shall be without ridges, projections, voids and concrete droppings that would be mechanically detrimental to coating application or function.

Neat cement sacking is not an acceptable surface preparation for coatings.

Plywood: Plywood should be new or cleaned and sanded. Plywood must be exterior grade plywood, having either tongue-and-groove edges and ends perpendicular to supports. The plywood will be 19/32" or 21/32" thick.

Plywood should be installed with a maximum of 1/16" space between the plywood sheets and laid over joists on 16" centers. Plywood sheets must be screwed down securely or nailed with coated annular ring or screw shank nails.

If the underside of the joists is covered, the floor/ceiling cavity must be vented to aid in drying and to minimize moisture buildup in the deck structure.

Damaged panels will be repaired/replaced before coating.

Old plywood must be cleaned and sanded before priming with Polyprime at a rate of ⅓ gallon per 100 square feet prior to coating application.

The only acceptable grade of plywood is APA rated, exterior grade with exterior glue or better.

The appearance and physical characteristics of the plywood and grade should be considered.

Note: The above plywood grade is called out in compliance with the American Plywood Association's Standard. Plywood grading which does not reference APA markings may not be a suitable grade.

No liability is assumed by Polycoat Products for defects in the substrate.

PROTECTION OF WORK

While work is underway and for 72 hours thereafter, traffic from other trades should be stopped.

Material should be stored on plywood or non-asphaltic insulation board.

Adjacent surfaces which are not to be coated, such as walls, thresholds, fascias, etc., should be carefully masked before priming and coating. Mask vertical surfaces at the line detailed in the architectural drawings or, if none is shown, mask 4" or more up from the deck. When coatings are applied by spray, caution is necessary, particularly during windy weather, to prevent overspray damage.

SECTION 3: PRIMING

Polycoat Products elastomeric coatings frequently require a primer. The preferred primer varies with the substrate as described below. Guide specifications state primer requirements. Product data sheets contain application instructions.

CONCRETE

Sealing Concrete: Most concrete has surface porosity, although it is seldom visible. This porosity develops at the time of placement from various causes including water content, drying rate, aggregate type and troweling action. When elastomeric coatings are placed over concrete, there is a risk that blisters will form from outgassing through surface pores. This risk is minimized by the use of a primer system.

Polyprime should be applied on all concrete and dense aggregate structural concrete.

Prime entire deck surface and all vertical or sloping surfaces of curbs, cants, parapets, etc., which are to receive coatings, with one coat of Polyprime applied by roller or spray. The coverage rate is about ⅓ gallons per 100 square feet.

Allow urethane primers to dry for one hour or more before applying the base coat.

Allow epoxy primers to dry until tack free before applying the base coat.

Note: Surface temperature is more important than air temperature. The normal minimum surface temperature for application is 50°F (10°C).

WOOD

Polycoat Products urethane coatings are self-priming when applied to new wood construction (primer is not necessary). For optimum adhesion on existing plywood, it is advisable to use Polyprime.

STEEL

Wire brush or sand steel surfaces until the metal is bright. Solvent wipe after cleaning.

Apply Polyprime at the rate of ⅓ gallon per 100 square feet. Primer should be permitted to dry tack free before applying subsequent coats. This ensures proper adhesion under most conditions. Never apply Polyprime to wet or moist surfaces.

COATED SURFACES

Decks to be re-coated should be thoroughly cleaned, dried, and primed with Polyprime at the rate of ⅓ gallon per 100 square feet.

All coated surfaces require special attention. A test patch should be applied to check for bonding. If adhesion is good, the surface is smooth, and no lifting occurs, apply coating as specified. If adhesion to substrate is poor, and lifting does occur, remove old coating before new coatings are applied.

SECTION 4: EXPANSION JOINTS

SEALING OF CRACKS, CONSTRUCTION JOINTS, SUBSTRATE CHANGES, AND FLASHINGS

This step, which follows priming and precedes coating, is the most critical stage in the application of Polycoat Products coatings. Success or failure in application of this system depends largely on how they are treated.

Working cracks in concrete are joints or cracks which have moved or will move appreciably, in any or all of the three

dimensions, due to thermal changes or vibration. A crack which extends at each end to the edge of the surface, to a building expansion joint or to another working crack may be a working crack. A crack with minute broken fragments along the edge is probably a working crack.

CONCRETE
To prepare expansion joints, substrate changes, cracks and flashings, apply backer rod if necessary then a polyurethane sealant and reinforcement tape, embedded into the sealant, with a stripe coat centered over the crack. The crack must be fully sealed. Any cracks over 1/16" shall be routed to ¼" x ¼" prior to application of sealant and reinforcing tape.

SUBSTRATE CHANGES
Use caulking and reinforcement tape, with a stripe coat centered over the crack, backer rod and polyurethane sealant as required at changes in substrate material. Reinforcement tape must be embedded into the sealant. It is also required when the substrate changes plane in a valley, or if a crack exists at other changes in plane.

JOINTS IN PLYWOOD
When a joint must be invisible at close range, filling voids and nail heads is necessary. Any wood-adhering, non-shrinking, firm-setting, non-staining material is satisfactory. An epoxy/100 mesh sand grout may also be used.

To prepare plywood joints, flashings and substrate changes, apply a polyurethane sealant and reinforcement tape embedded into the sealant with a stripe coat centered over supported joints on the same plane, supported joints at changes in plane, or unsupported joints.

Defects in taping and flashing must be corrected prior to proceeding with base coats.

SECTION 5: COATING APPLICATION

Polycoat Products materials are one or more components, liquid applied polyurethanes. When properly combined and applied they cure to form tough, high strength elastomeric membranes. All specified quantities are minimums and are on an undiluted basis. No allowances have been made for material waste, uneven surfaces, spillage, material applied thicker than specified, or material left in containers or equipment.

MIXING
Important: All products must be mixed according to the product data sheets prior to use.

Mix two component materials individually before combining. Stir all materials thoroughly before use. Examine both Part-A and Part-B for graininess. Partial containers should not be stored longer than one or two days as exposure to atmospheric moisture induces cure. Keep containers covered whenever possible.

For best results, power mix thoroughly for five minutes, scraping sides of container. Best results are obtained by pouring Part-B into Part-A while mixing. Polyethylene or polypropylene mixing containers are recommended, as they can be reused. Cured material is easily stripped out cleanly the following day.

If the product requires a catalyst, the best results will be obtained by pouring the catalyst into the product while mixing.

Mix only as much material as can be used within the specified pot life.

COLD WEATHER APPLICATION
During cold weather, special precautions must be taken in applying urethanes. These coatings should not be applied to surfaces 50°F (10°C) or colder. Store materials above 65°F (18°F), or warm to above 65°F (18°C) prior to use.

If graininess is observed, warm the entire contents of the can to 60°F (16°C), and mix until smooth.

Lower temperature and humidity may extend curing time.

HOT WEATHER APPLICATION
Product data on pot life and cure rate are provided for materials at 70°F (21°C). At temperatures above 70°F (21°C), pot life and cure time will decrease proportionately as temperature and humidity increase. Store materials out of direct sun and mix only the amount that can be applied within the pot life. Refer to product data sheets for further information.

APPLICATION OF BASECOAT
All specified quantities are on an undiluted basis. Better films are usually produced with less entrapped air when the rate of application is no more than 1½ gallons per 100 square feet. However, the recommended rate varies by product and specification.

Apply Polycoat Products urethane in a uniform thickness without skips or holidays. Basecoats can be squeegeed or rolled, depending on job type and size. Allow each coat to dry until tack free and sufficiently cured for foot traffic before applying additional urethane coating. A period less than one hour to overnight may be required depending on drying conditions and the particular product used.

For a more slip-resistant surface, uniformly broadcast a washed, dry, rounded 16 to 90 mesh silica sand into the wet topcoat at a rate at a rate of 20 lbs/100 sq.ft. or as required to achieve a slip-resistant finish. Slip resistance will vary depending on the coating thickness.

Extend each coat over cants and up vertical surfaces of pads, curbs, walls and parapets. The top of curbs and equipment pads shall be similarly coated. In the case of walls and parapets, extend coating to the point where counter flashings

enter the masonry. Where no counter flashing is specified, hold the base coats just short of the termination line at the edge of the deck to avoid seeping under masking tape or spilling on adjacent unprotected surfaces.
If the entire job cannot be carried through to completion without interruption, the interruption should occur after the first coat. This will provide protection for the system.

Coated surfaces must be clean and dry before work resumes.

APPLICATION OF TOPCOAT
Inspect the surface for damage prior to the application of topcoat. Any surface damage must be repaired by replacing base coat so that a continuous membrane in substantially uniform thickness covers the entire surface prior to topcoat application.

While careful color matching procedures are used, different batches of urethane may vary slightly in hue. This variation will be too slight to be perceptible if changes are made at natural breaks in the surface. Intermixing of batches may be necessary or desirable to ensure consistency in topcoat color.

CAUTION
Excessively heavy applications of urethane can cause pigment separation during drying, resulting in a blotched color. Uniform application at the specified coverage rate is important to provide proper results.

Remove masking tape at edges of coating area as soon as the final coat of urethane is applied. By removing the tape while the coating is wet, it will not be necessary to cut it off and will avoid damage to the edge of the coating. Any seepage under the tape on rough surfaces can be wiped off with thinner while wet.

The following conditions must not be coated with Polycoat Products coating systems: on grade or below grade slabs, split slabs with buried membrane, sandwich slabs with insulation, slabs over unvented metal pan, suspended pool decks, swimming pools, magnesite or lightweight concrete, asphalt surfaces or asphalt overlays.

Floor hardeners may adversely affect the adhesion of the coating.

Polycoat Products coating systems should not be subjected to rising water tables or hydrostatic pressure on slab-on-grade applications.

If there is a question regarding a substrate, please contact a Polycoat Products representative.

Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local Polycoat Products representative or visit our website for current technical data and instructions.

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MEASUREMENT & CONVERSION CHARTS

When You Know	Multiply By	To Find
Area		
Inches²	6.45163	Centimeters²
Centimeters²	0.155	Inches²
Feet²	0.0929	Meters²
Meters²	10.76387	Feet²
Yards²	0.83613	Meters²
Meters²	1.19599	Yards²
Length		
Inches	0.0254	Meters
Meters	39.37	Inches
Feet	0.3048	Meters
Meters	3.2808	Feet
Yards	0.9144	Meters
Meters	1.09361	Yards
Miles	1.609	Kilometers
Kilometers	0.621	Miles
Weight		
Ounces	28.35	Grams
Grams	0.033527	Ounces
Pounds	0.45359	Kilograms
Kilograms	2.20462	Pounds
Net Ton	0.90719	Metric Ton
Metric Ton	1.10231	Net Ton
Gross Ton	1.01605	Metric Ton
Metric Ton	0.98421	Gross Ton
Slope		
Inch/Floor	8.33	Slope (%)
Centimeters/Meter	8.33	Slope (%)
Volume		
Inches³	0.016387	Liters
Liters	61.023	Inches³
Feet³	28.316	Liters
Liters	0.035317	Feet³
Quarts	0.94636	Liters
Liters	1.05668	Quarts
Gallons	3.78543	Liters
Liters	0.26417	Gallons
Miscellaneous		
Pounds per liner inch	0.1752	Kilonewtons/m
Mega pascals	145.038	Lbs. per sq. in.
Pounds per gallon	119.7	Grams per liter

When You Know	Multiply By	To Find
Rate		
Gallons/100 ft²	0.4075	Liters/m²
Liters/m²	2.45399	Gallons/100 ft²
Pounds/ft²	4.882	Kilograms/m²
Kilograms/m²	0.20483	Pounds/ft²
Thickness		
Mil	25.4	Micron

How to Calculate Mil Thickness

Theoretical: 1 gallon of 100% solids material applied over 100 sq. ft. yields 16 dry mils.

$$\text{Dry Mil Thickness} = \frac{\text{Gallons per 100 sq.ft.} \times 16 \times \%\ \text{Solids by Volume}}{100}$$

$$\text{Gallons per 100 sq. ft.} = \frac{\text{Dry Mil Thickness} \times 100}{16 \times \%\ \text{Solids by Volume}}$$

Measures of Length

12 inches = 1 foot — 1 sq. ft. = 144 sq. in.
1 sq. yd. = 9 sq. ft. — 1 sq. mile = 640 acres
1 acre = 4840 sq. yd. = 43,560 sq. ft.
100 mm² = 1 cm² — 10,000 cm² = 1 m²

Measures of Weight

16 ounces = 1 pound — 1000 grams = 1 kg
2000 pounds = 1 net ton — 1000 kg = 1 metric ton

Sealant Estimation

Linear feet per full gallon (231 cubic inch)

Depth of Joint \ Width of Joint	¼"	⅜"	½"	⅝"	¾"	⅞"	1"
¼"	308	205	154	123	102	88	77
⅜"	205	136	102	82	68	58	51
½"	154	102	77	61	51	44	38
⅝"	123	82	61	49	41	35	30
¾"	102	68	51	41	34	29	25
⅞"	88	58	44	36	29	25	22
1"	77	51	38	30	25	22	19

Coverages and yields shown do not include allowances for loss or waste and variations in job conditions. Each user must establish their own factors for loss from experience. These figures are without the use of Backer Rod.

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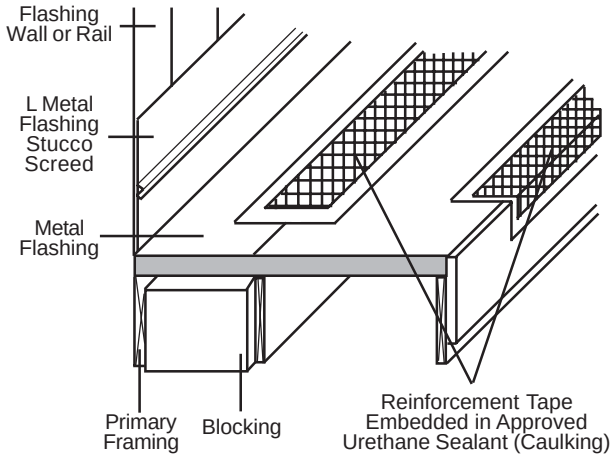
ARCHITECTURAL DETAILS

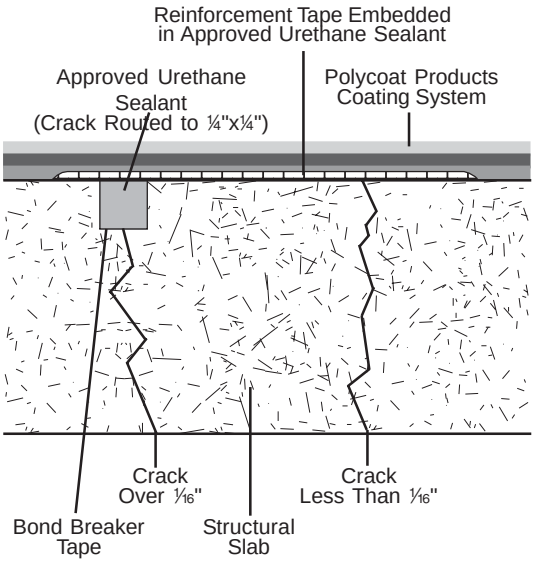
The following sketches provide guidelines for the installation of Polycoat Products coating systems. These details should be used as a guideline only. Decisions on final details should be made by the applicator after evaluating site conditions, code requirements and other standards.

For detailed information on the installation of the Polycoat Products waterproofing systems, refer to the general guidelines and individual system guide specifications.

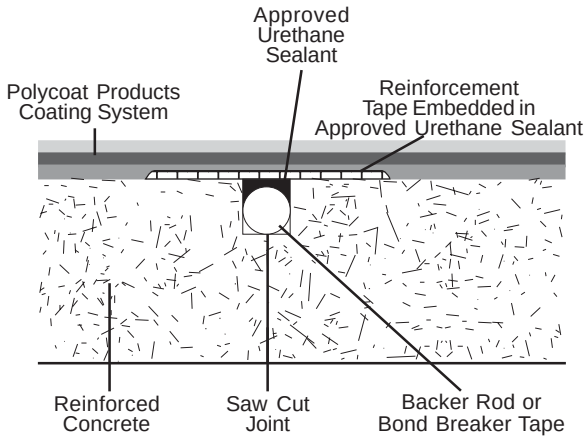
FLASHING DETAIL



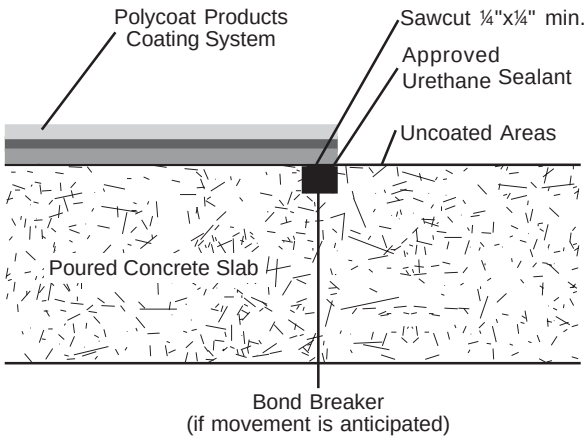
CRACK DETAIL



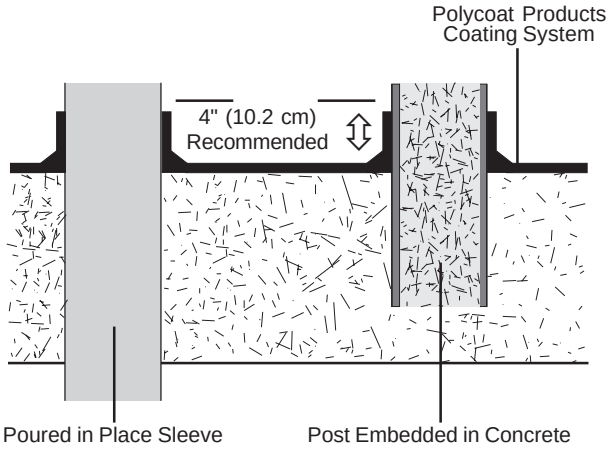
CRACK CONTROL



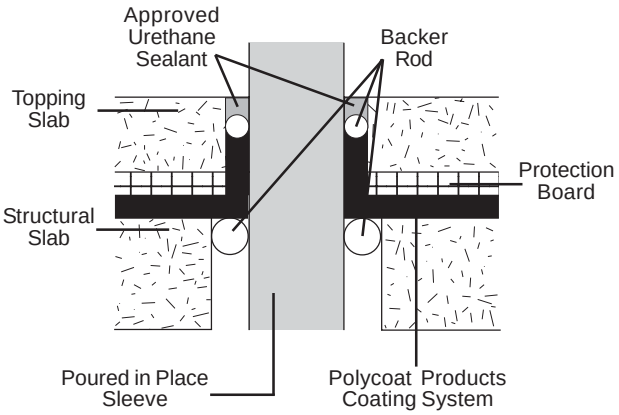
TERMINATION DETAIL



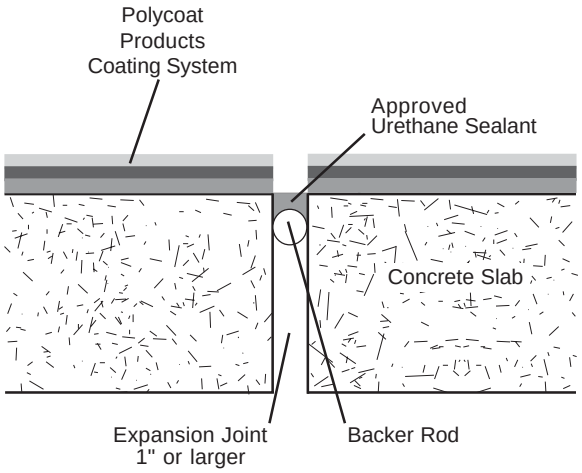
VERTICAL PROJECTION



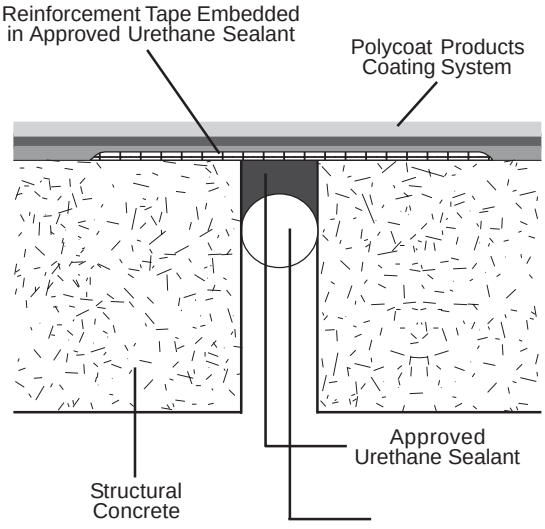
VERTICAL PROJECTION BETWEEN SLAB



EXPANSION JOINT DETAIL
(Greater Than 1")



EXPANSION JOINT DETAIL
(Less than 1")



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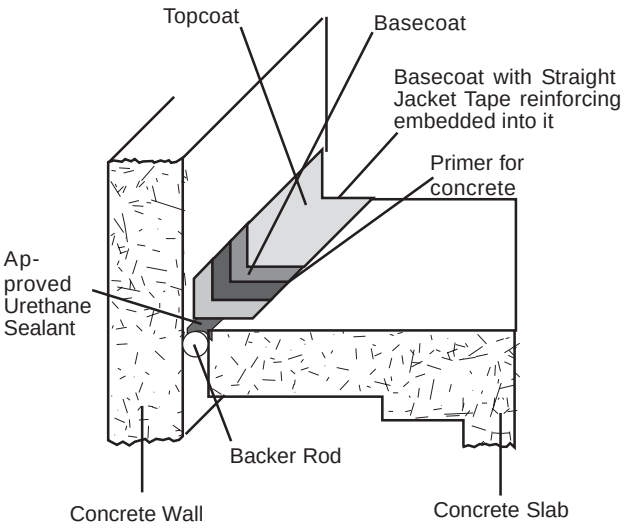
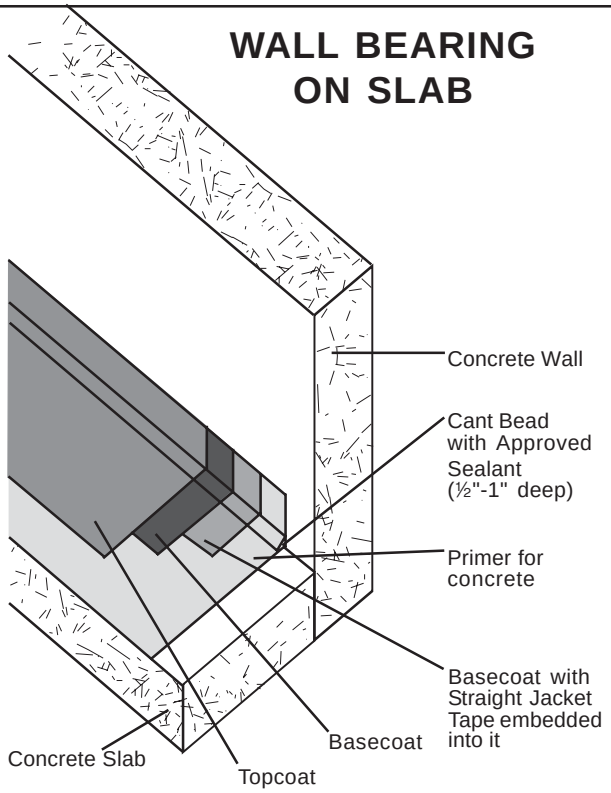
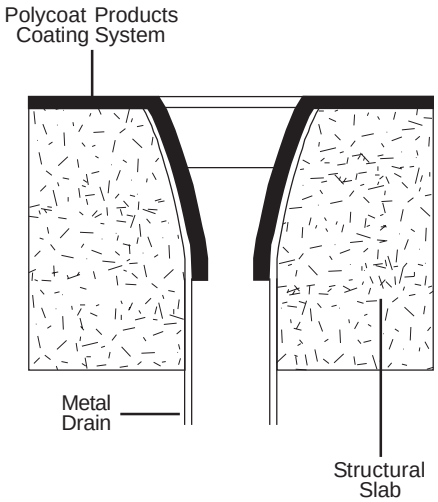
JOINT AT WALL/SLAB



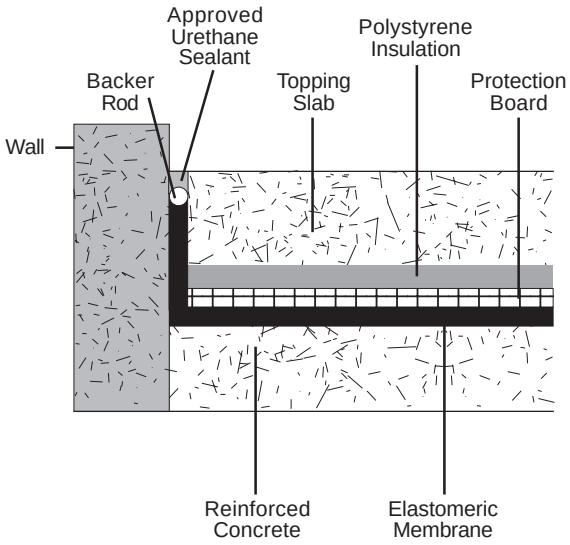
WALL BEARING ON SLAB



DRAIN DETAIL



BETWEEN SLAB



POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® LP-11

Two Component Modified Polyurea Protective Coating

DESCRIPTION

Polyeuro® LP-11 is a two component, 1:1, 100% solids, fast set, liquid applied, modified polyurea liner system for metal, concrete, fiberglass and wood surfaces.

FEATURES

- ❖ Seamless
- ❖ Tough and Elastomeric
- ❖ Chemical Resistant
- ❖ Low Temperature Flexibility
- ❖ Abrasion and Impact Resistant
- ❖ Low Pressure Application
- ❖ High Build
- ❖ Quick Drying

TYPICAL USES

- ❖ Truck Bed Surfaces
- ❖ Utility Vehicles
- ❖ Cargo liners
- ❖ Boat Linings
- ❖ Waterproof Decking
- ❖ Encapsulation of Fiberglass Bodies
- ❖ Cargo Holds
- ❖ Horse Trailers
- ❖ Walkways
- ❖ Mold Castings

COLOR

Clear/Neutral or Black. Custom colors are available upon request. Color packs, when used, must be added to Part-B.

Due to its aromatic composition, Polyeuro® LP-11 will tend to yellow or darken in color after exposure to UV light. Polyeuro® LP-11 may be topcoated within twelve hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish.

PACKAGING

10 gallon kit: 5 gallons Part-A (Isocyanate side) and 5 gallons Part-B (Resin side).

100 gallon kit: 50 gallons Part-A (Isocyanate side) and 50 gallons Part-B (Resin side).

COVERAGE

Polyeuro® LP-11 may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

TECHNICAL DATA

Mix Ratio, by volume	1A:1B
Pot Life @ 80°F	12-16 seconds
Tack Free Time (@ 150 mils thickness)	40-60 seconds
Recoat Time	6-12 hours
Viscosity at 80°F (27°C), Brookfield:	
Side-A	400-500 cps
Side-B	700-900 cps
Density (Side-A & B Combined)	9.22 lbs/gal
Flash Point	>200°F
Hardness, ASTM D-2240	91-93 Shore A
Tensile, ASTM D-412	2000 ± 300 psi
Elongation, ASTM D-412	250 ± 50%
Tear, ASTM D-624	175-200 pli
Service Temperature	-20°F to 200°F

Note: Above physicals are from lab drawn films. Actual spray physicals may vary.

New and Old Concrete:

Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:

ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete
ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 - Concrete surface preparation

Wood:

All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):

Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near

White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:
Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:
Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:
Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:
The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:
Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:
Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:
Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:
Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:
An adhesion test is recommended prior to starting the project.

MIXING
Polyeuro® LP-11 may not be diluted under any circumstances. Thoroughly mix Polyeuro® LP-11 Part-B (Resin side) with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION
Both Side-A and Side-B materials should be preconditioned to 75-80°F before application.

Recommended surface temperature must be at least 5°F above the dew point.

Polyeuro® LP-11 should be applied using plural component, low pressure spray mixing equipment. The simple spray equipment can have a single motor driving two separate fixed ratio proportioning pumps. Side-A and Side-B are pumped separately to a static mixing tube for air assisted or airless spray. It is recomended to use a x 24 element mixing wand/ Static spiral mixer for proper mixing.

Contact Polycoat Products for further information.

STORAGE
Polyeuro® LP-11 has a shelf life of six (6) months from date of manufacture in original, factory sealed containers.

Avoid exposure to freezing temperatures.

Store drums on wooden pallets to avoid direct contact with the ground.

If stored for a long period of time, rotate Side-A and Side-B drums regularly.

LIMITATIONS
Do not open until ready to use.

Both Side-A and Side-B containers must be fitted with a desiccant device during use.

WARNING
This product contains isocyanate and curative material.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® LP-12

Two Component Modified Polyurea Protective Coating

DESCRIPTION

Polyeuro® LP-12 is a two component, 1:2, 100% solids, fast set, liquid applied, modified polyurea liner system for metal, concrete, fiberglass and wood surfaces.

FEATURES

- ❖ Seamless
- ❖ Tough and Elastomeric
- ❖ Chemical Resistant
- ❖ Low Temperature Flexibility
- ❖ Abrasion and Impact Resistant
- ❖ Low Pressure Application
- ❖ High Build
- ❖ Quick Drying

TYPICAL USES

- ❖ Truck Bed Surfaces
- ❖ Utility Vehicles
- ❖ Cargo liners
- ❖ Boat Linings
- ❖ Waterproof Decking
- ❖ Encapsulation of Fiberglass Bodies
- ❖ Cargo Holds
- ❖ Horse Trailers
- ❖ Walkways
- ❖ Mold Castings

COLOR

Clear/Neutral or Black. Custom colors are available upon request. Color packs, when used, must be added to Part-B.

Due to its aromatic composition, Polyeuro® LP-11 will tend to yellow or darken in color after exposure to UV light. Polyeuro® LP-12 may be topcoated within twelve hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish.

PACKAGING

15 gallon kit: 5 gallons Side-A and 10 gallons Side-B.

150 gallon kit: 50 gallons Side-A and 100 gallons Side-B.

COVERAGE

Polyeuro® LP-12 may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

TECHNICAL DATA

Mix Ratio, by volume	1A:2B
Pot Life @ 80°F	12-16 seconds
Tack Free Time (@ 150 mils thickness)	40-60 seconds
Recoat Time	6-12 hours
Viscosity at 80°F (27°C), Brookfield:	
Side-A	700-900 cps
Side-B	700-900 cps
Density (Side-A & B Combined)	9.2 lbs/gal
Flash Point	>200°F
Hardness, ASTM D-2240	91-93 Shore A
Tensile, ASTM D-412	1300 ± 200 psi
Elongation, ASTM D-412	200 ± 50%
Tear, ASTM D-624	175-200 pli
Service Temperature	-20°F to 200°F

Note: Above physicals are from lab drawn films. Actual spray physicals may vary.

New and Old Concrete:

Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:

ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete
ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 - Concrete surface preparation

Wood:

All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):

Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:
Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:
Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:
Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:
The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:
Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:
Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:
Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:
Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:
An adhesion test is recommended prior to starting the project.

MIXING
Polyeuro® LP-12 may not be diluted under any circumstances. Thoroughly mix Polyeuro® LP-12 Part-B (Resin side) with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION
Both Side-A and Side-B materials should be preconditioned to 75-80°F before application.

Recommended surface temperature must be at least 5°F above the dew point.

Polyeuro® LP-12 should be applied using plural component, low pressure spray mixing equipment. The simple spray equipment can have a single motor driving two separate fixed ratio proportioning pumps. Side-A and Side-B are pumped separately to a static mixing tube for air assisted or airless spray. It is recomended to use a x 24 element mixing wand/ Static spiral mixer for proper mixing.

Contact Polycoat Products for further information.

STORAGE
Polyeuro® LP-12 has a shelf life of six (6) months from date of manufacture in original, factory sealed containers.

Avoid exposure to freezing temperatures.

Store drums on wooden pallets to avoid direct contact with the ground.

If stored for a long period of time, rotate Side-A and Side-B drums regularly.

LIMITATIONS
Do not open until ready to use.

Both Side-A and Side-B containers must be fitted with a desiccant device during use.

WARNING
This product contains isocyanate and curative material.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® LP-1188

Two Component Modified Polyurea Protective Coating

DESCRIPTION

Polyeuro® LP-1188 is a two component, 1:1.88, 100% solids, fast set, liquid applied, modified polyurea liner system for metal, concrete, fiberglass and wood surfaces.

FEATURES

- ❖ Seamless
- ❖ Tough and Elastomeric
- ❖ Chemical Resistant
- ❖ Low Temperature Flexibility
- ❖ Abrasion and Impact Resistant
- ❖ Low Pressure Application
- ❖ High Build
- ❖ Quick Drying

TYPICAL USES

- ❖ Truck Bed Surfaces
- ❖ Utility Vehicles
- ❖ Cargo liners
- ❖ Boat Linings
- ❖ Waterproof Decking
- ❖ Encapsulation of Fiberglass Bodies
- ❖ Cargo Holds
- ❖ Horse Trailers
- ❖ Walkways
- ❖ Mold Castings

COLOR

Clear/Neutral or Black. Custom colors are available upon request. Color packs, when used, must be added to Part-B.

Due to its aromatic composition, Polyeuro® LP-1188 will tend to yellow or darken in color after exposure to UV light. Polyeuro® LP-1188 may be topcoated within twelve hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish.

PACKAGING

One 55 gallon drum net content 500 lbs. of Side-A (Isocyanate side) and two 55 gallon drum net content 450 lbs. each drum of Side-B (Resin side).

COVERAGE

Polyeuro® LP-1188 may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

TECHNICAL DATA

Mix Ratio, by volume	1A:1.88B
Pot Life.	12-16 seconds
Tack Free Time (@ 150 mils thickness)	40-60 seconds
Recoat Time	6-12 hours
Viscosity at 80°F (27°C), Brookfield:	
Side-A	700-900 cps
Side-B	700-900 cps
Density (Side-A & B Combined)	9.2 lbs/gal
Flash Point	>200°F
Hardness, ASTM D-2240	91-93 Shore A
Tensile, ASTM D-412	1300 ± 200 psi
Elongation, ASTM D-412	200 ± 50%
Tear, ASTM D-624	175-200 pli
Service Temperature	-20°F to 200°F

Note: Above physicals are from lab drawn films. Actual spray physicals may vary.

New and Old Concrete:

Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:

ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete
ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 - Concrete surface preparation

Wood:

All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):

Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:
Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:
Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:
Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:
The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:
Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:
Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:
Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:
Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:
An adhesion test is recommended prior to starting the project.

MIXING
Polyeuro® LP-1188 may not be diluted under any circumstances. Thoroughly mix Polyeuro® LP-1188 Part-B (Resin side) with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION
Both Side-A and Side-B materials should be preconditioned to 75-80°F before application.

Recommended surface temperature must be at least 5°F above the dew point.

Polyeuro® LP-1188 should be applied using plural component, low pressure spray mixing equipment. The simple spray equipment can have a single motor driving two separate fixed ratio proportioning pumps. Side-A and Side-B are pumped separately to a static mixing tube for air assisted or airless spray. It is recomended to use a x 24 element mixing wand/ Static spiral mixer for proper mixing.

Contact Polycoat Products for further information.

STORAGE
Polyeuro® LP-1188 has a shelf life of six (6) months from date of manufacture in original, factory sealed containers.

Avoid exposure to freezing temperatures.

Store drums on wooden pallets to avoid direct contact with the ground.

If stored for a long period of time, rotate Side-A and Side-B drums regularly.

LIMITATIONS
Do not open until ready to use.

Both Side-A and Side-B containers must be fitted with a desiccant device during use.

WARNING
This product contains isocyanate and curative material.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® LP-12E

Two Component Modified Polyurea Protective Coating

DESCRIPTION

Polyeuro® LP-12E is a two component, 1:2, 100% solids, high elongation, fast set, liquid applied, modified polyurea liner system for metal, concrete, fiberglass and wood surfaces.

FEATURES

- ❖Seamless
- ❖Tough and Elastomeric
- ❖Chemical Resistant
- ❖Low Temperature Flexibility
- ❖Abrasion and Impact Resistant
- ❖Low Pressure Application
- ❖High Build
- ❖Quick Drying

TYPICAL USES

- ❖Truck Bed Surfaces
- ❖Utility Vehicles
- ❖Cargo liners
- ❖Boat Linings
- ❖Waterproof Decking
- ❖Cargo Holds
- ❖Horse Trailers
- ❖Industrial Floorings
- ❖Walkways
- ❖Mold Castings
- ❖Encapsulation of Fiberglass Bodies
- ❖Secondary Containment Lining with or without Geo Textile

COLOR

Clear/Neutral or Black. Custom colors are available upon request. Color packs, when used, must be added to Part-B.

Due to its aromatic composition, Polyeuro® LP-12E will tend to yellow or darken in color after exposure to UV light. Polyeuro® LP-12E may be topcoated within twelve hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish.

PACKAGING

15 gallon kit: 5 gallons Side-A (Isocyanate side) and 10 gallons Side-B (Resin side).

150 gallon kit: 50 gallons Side-A (Isocyanate side) and 100 gallons Side-B (Resin side).

COVERAGE

Polyeuro® LP-12E may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

TECHNICAL DATA

Mix Ratio, by volume	1A:2B
Pot Life.	14-18 seconds
Tack Free Time (@ 150 mils thickness)	40-60 seconds
Recoat Time	6-12 hours
Viscosity at 80°F (27°C), Brookfield:	
Side-A	900-1000 cps
Side-B	700-900 cps
Density (Side-A & B Combined)	9.2 lbs/gal
Flash Point	>200°F
Hardness, ASTM D-2240	85 ± 5 Shore A
Tensile, ASTM D-412	2800 ± 200 psi
Elongation, ASTM D-412	430 ± 50%
Tear, ASTM D-624	220 ± 20 pli
Service Temperature	-20°F to 200°F

Note: Above physicals are from lab drawn films. Actual spray physicals may vary.

New and Old Concrete:

Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:

ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete
ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 - Concrete surface preparation

Wood:

All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):

Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near

White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:
Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:
Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:
Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:
The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:
Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:
Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:
Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:
Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:
An adhesion test is recommended prior to starting the project.

MIXING
Polyeuro® LP-12E may not be diluted under any circumstances. Thoroughly mix Polyeuro® LP-12E Part-B (Resin side) with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION
Both Side-A and Side-B materials should be preconditioned to 75-80°F before application.

Recommended surface temperature must be at least 5°F above the dew point.

Polyeuro® LP-12E should be applied using plural component, low pressure spray mixing equipment. The simple spray equipment can have a single motor driving two separate fixed ratio proportioning pumps. Side-A and Side-B are pumped separately to a static mixing tube for air assisted or airless spray. It is recomended to use a x 24 element mixing wand/ Static spiral mixer for proper mixing.

Contact Polycoat Products for further information.

STORAGE
Polyeuro® LP-12E has a shelf life of six (6) months from date of manufacture in original, factory sealed containers.

Avoid exposure to freezing temperatures.

Store drums on wooden pallets to avoid direct contact with the ground.

If stored for a long period of time, rotate Side-A and Side-B drums regularly.

LIMITATIONS
Do not open until ready to use.

Both Side-A and Side-B containers must be fitted with a desiccant device during use.

WARNING
This product contains isocyanate and curative material.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® MPL 82

Two Component Modified Polyurea Protective Coating

DESCRIPTION

Polyeuro® MPL 82 is a two component, 1:1, 100% solids, fast set, liquid applied, modified polyurea liner system for metal, concrete, fiberglass and wood surfaces.

FEATURES

- ❖Seamless
- ❖Tough and Elastomeric
- ❖Chemical Resistance
- ❖Low Temperature Flexibility
- ❖Abrasion and Impact Resistant
- ❖High Build
- ❖Quick Drying
- ❖Cargo Skid Resistance

TYPICAL USES

- ❖Truck Bed Surfaces
- ❖Utility Vehicles
- ❖Waterproof Decking
- ❖Boat Linings
- ❖Encapsulation of Fiberglass Bodies
- ❖Cargo Holds
- ❖Horse Trailers
- ❖Cargo liners
- ❖Walkways

COLOR

Clear/Neutral. Custom colors are available upon request. Color Packs, when used, must be added to Part-B.

Due to its aromatic composition, Polyeuro® MPL 82 will tend to yellow or darken in color and will become flat after exposure to UV light. Polyeuro® MPL 82 may be topcoated within twelve hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish.

PACKAGING

10 gallon kit: 5 gallons (47 lbs. net) Part-A (Isocyanate side) and 5 gallons (43 lbs. net) Part-B (Resin side).

100 gallon kit: 50 gallons (463 lbs. net) Part-A (Isocyanate side) and 50 gallons Part-B (Resin side) (Black: 433 lbs. net, Clear: 431 lbs. net).

COVERAGE

Polyeuro® MPL 82 may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

New and Old Concrete:

Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:

ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete
ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 - Concrete surface preparation

Wood:

All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):

Remove all oil, grease, weld spatters and round off any sharp

TECHNICAL DATA

Mix Ratio, by volume	1A:1B
Pot Life at 150-160°F	3-5 seconds
Tack Free Time (150 mils)	20-40 seconds
Recoat Time	0-12 hours
Viscosity at 150-160°F (65.5-71°C), Brookfield,	
Part-A	100 ± 50 cps
Part-B	100 ± 50 cps
Density (Side-A & B Combined)	9.0 lbs/gal
Flash Point	>200°F
Hardness, ASTM D-2240*	82 ± 5 Shore A
Tensile, ASTM D-412*	1800 ± 300 psi
Elongation, ASTM D-412*	250 ± 20%
Tear, ASTM D-624*	250 ± 40 pli
Service Temperature	-20°F to 250°F

(*These physical properties from sample sprayed with Graco Foam Cat 200 @ 2000 psi minimum, with Gusmer GX7-400 mechanical purge gun @ 150-160°F. Different machine and parameter will change these properties. User should perform their own independent testing as properties are approximate.)

edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:
Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:
Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:
Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:
The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:
Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:
Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:
Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:
Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:
An adhesion test is recommended prior to starting the project.

MIXING

Polyeuro® MPL 82 may not be diluted under any circumstances. Thoroughly mix Polyeuro® MPL 82 Part-B (Resin side) with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION

Both Side-A and Side-B materials should be preconditioned to 75-80°F before application.

Recommended surface temperature must be at least 5°F above the dew point.

Polyeuro® MPL 82 should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor, Glass Craft or other equivalent machine may be used.

Both Part-A and Part-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 150°F. Adequate pressure and temperature should be maintained at all times.

Polyeuro® MPL 82 should be sprayed in smooth, multidirectional passes to improve uniform thickness and appearance.

STORAGE

Polyeuro® MPL 82 has a shelf life of six (6) months from date of manufacture, in factory-sealed containers.

Part-A and Part-B drums are recommended to be stored above 60°F.

Avoid freezing temperatures.

Store drums on wooden pallets to avoid direct contact with the ground.

If stored for a long period of time, rotate Part-A and Part-B drums regularly.

LIMITATIONS

Do not open until ready to use.

Both Part-A and Part-B containers must be fitted with a desiccant device during use.

WARNING

This product contains Isocyanates and Curative Material.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® MPL 11

Two Component Modified Polyurea Protective Coating

DESCRIPTION

Polyeuro® MPL 11 is a two component, 1:1, 100% solids, fast set, liquid applied, modified polyurea liner system for metal, concrete, fiberglass and wood surfaces.

FEATURES

- ❖ Seamless
- ❖ Tough and Elastomeric
- ❖ Chemical Resistant
- ❖ Low Temperature Flexibility
- ❖ Abrasion and Impact Resistant
- ❖ High Build
- ❖ Quick Drying

TYPICAL USES

- ❖ Truck Bed Surfaces
- ❖ Utility Vehicles
- ❖ Cargo liners
- ❖ Boat Linings
- ❖ Waterproof Decking
- ❖ Cargo Holds
- ❖ Horse Trailers
- ❖ Industrial Floorings
- ❖ Walkways
- ❖ Containment Areas
- ❖ Encapsulation of Fiberglass Bodies and Polystyrene Foams

COLOR

Clear/Neutral. Custom colors are available upon request. Color Packs, when used, must be added to Part-B.

Due to its aromatic composition, Polyeuro® MPL 11 will tend to yellow or darken in color and will become flat after exposure to UV light. Polyeuro® MPL 11 may be topcoated within twelve hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish.

PACKAGING

10 gallon kit: 5 gallons (47 lbs. net) Part-A (Isocyanate side) and 5 gallons (43 lbs. net) Part-B (Resin side).

100 gallon kit: 50 gallons (477 lbs. net) Part-A (Isocyanate side) and 50 gallons Part-B (Resin side) (neutral: 426 lbs. net; black: 420 lbs. net).

COVERAGE

Polyeuro® MPL 11 may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

TECHNICAL DATA

Mix Ratio, by volume	1A:1B
Pot Life @ 150°F	2 - 5 secs
Tack Free Time (150 mils Thick)	10-30 secs
Recoat Time	0 - 12 hours
Viscosity at 150-160°F (65.5-71°C), Brookfield:	
Side-A	120 ± 20 cps
Side-B	60 ± 20 cps
Density (Side-A & B Combined)	9.1 lbs/gal
Flash Point	> 200°F
Hardness, ASTM D-2240*	50 ± 5 Shore D
Tensile, ASTM D-412*	2700 ± 300 psi
Elongation, ASTM D-412*	225 ± 20%
Tear, ASTM D-624*	400 ± 40 pli
Service Temperature	-20°F to 250°F
Water Vapor Permeability, ASTM E-96	0.2338 perm-inch
VOC Content	0 gm/lit
Recommended Applied Thickness	> 2 mm
Return to Service: Foot Traffic	1 - 4 hours
Return to Service: Full Service	> 24 hours
Taber Abrasion Resistance, ASTM D4060 (CS17 wheel, 1000 cycles, 1 kg load)(maximum)	2.8 mg loss
Water Absorption, ASTM D471 (maximum 23°C, 24 hours)	< 0.5 %
Crack Bridging, ASTM C836 (-25°C, 1.6mm crack, 25 cycles)	Pass
Impact Resistance @ 25°C (ASTM G14)	> 200 lbs
Pull-Off Strength (minimum), ASTM D4541:	
Inter-Coat Adhesion (within recoat time)	Excellent
Concrete (Shot blast profile), substrate failure occurred	> 500 psi
Concrete (Primed), substrate failure occurred	> 500 psi
Steel (75-100 micron blast profile)	> 900 psi
Lineal Shrinkage	1 - 2%
Flexibility 1/8"(3mm) Mandrel Bend Test, ASTM D1737	Pass
Resistance to Weathering, ASTM G-23 (Type QUV Weatherometer-3000 hrs exposure)	No cracking or blistering. Color change, gloss reduction & chalking are noted.

(*These physical properties from sample sprayed with Graco Foam Cat 200 @ 2000 psi minimum, with Gusmer GX7-400 mechanical purge gun @ 150-160°F. Different machine and parameter will change these properties. User should perform their own independent testing as properties are approximate.)

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

New and Old Concrete:

Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface

that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:

ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete
ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 - Concrete surface preparation

Wood:

All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):

Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:

Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:

Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:

Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:

The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:

Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:

Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:

Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:

Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:

An adhesion test is recommended prior to starting the project.

MIXING

Polyeuro® MPL 11 may not be diluted under any circumstances. Thoroughly mix Polyeuro® MPL 82 Part-B (Resin side) with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION

Both Side-A and Side-B materials should be preconditioned to 75-80°F before application.

Recommended surface temperature must be at least 5°F above the dew point.

Polyeuro® MPL 11 should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor, Glass Craft or other equivalent machine may be used.

Both Part-A and Part-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 150°F. Adequate pressure and temperature should be maintained at all times.

Polyeuro® MPL 11 should be sprayed in smooth, multidirectional passes to improve uniform thickness and appearance.

STORAGE

Polyeuro® MPL 11 has a shelf life of six (6) months from date of manufacture, in factory-sealed containers.

Part-A and Part-B drums are recommended to be stored above 60°F.

Avoid freezing temperatures.

Store drums on wooden pallets to avoid direct contact with the ground.

If stored for a long period of time, rotate Part-A and Part-B drums regularly.

LIMITATIONS

Do not open until ready to use.

Both Part-A and Part-B containers must be fitted with a desiccant device during use.

WARNING

This product contains Isocyanates and Curative Material.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® MPL 55

Two Component Modified Polyurea Protective Coating

DESCRIPTION

Polyeuro® MPL 55 is a two component, 1:1, 100% solids, fast set, liquid applied, modified polyurea liner system for metal, concrete, fiberglass and wood surfaces.

FEATURES

- ❖Seamless
- ❖Tough and Elastomeric
- ❖Chemical Resistance
- ❖Low Temperature Flexibility
- ❖Abrasion and Impact Resistant
- ❖High Build
- ❖Quick Drying

TYPICAL USES

- ❖Truck Bed Surfaces
- ❖Utility Vehicles
- ❖Cargo liners
- ❖Boat Linings
- ❖Waterproof Decking
- ❖Cargo Holds
- ❖Horse Trailers
- ❖Industrial Floorings
- ❖Walkways
- ❖Containment Areas
- ❖Encapsulation of Fiberglass Bodies and Polystyrene Foams

COLOR

Clear/Neutral or Black. Custom colors are available upon request. Color Packs, when used, must be added to Part-B.

Due to its aromatic composition, Polyeuro® MPL 55 will tend to yellow or darken in color and will become flat after exposure to UV light. Polyeuro® MPL 55 may be topcoated within twelve hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish.

PACKAGING

10 gallon kit: 5 gallons (47 lbs. net) Side-A (Isocyanate side) and 5 gallons (43 lbs. net) Side-B (Resin side).

100 gallon kit: 50 gallons (473 lbs. net) Side-A (Isocyanate side) and 50 gallons (neutral: 433 lbs. net, black: 435 lbs. net) Side-B (Resin side)

PACKAGING

10 gallon kit: 5 gallons Part-A (Isocyanate side) and 5 gallons Part-B (Resin side).

100 gallon kit: 50 gallons Part-A (Isocyanate side) and 50 gallons Part-B (Resin side).

COVERAGE

Polyeuro® MPL 55 may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

New and Old Concrete:

Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids.

Concrete Surface Preparation Reference:

ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete
ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 - Concrete surface preparation

Wood:

All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas

TECHNICAL DATA

Mix Ratio, by volume	1A:1B
Pot Life @ 150°F	2-4 seconds
Tack Free Time (150 mils Thick)	10-30 seconds
Recoat Time	0-12 hours
Viscosity at 150-160°F (65.5-71°C), Brookfield:	
Side-A	120 ± 20 cps
Side-B	190 ± 20 cps
Density (Side-A & B Combined)	9.17 lbs/gal
Specific Gravity (Side-A & B Combined)	1.10
Flash Point	>200°F
Hardness, ASTM D-2240*	55 ± 5 Shore D
Tensile, ASTM D-412*	2700 ± 300 psi
Elongation, ASTM D-412*	200 ± 20%
Tear, ASTM D-624*	400 ± 40 pli
Service Temperature	-20°F to 250°F

(*These physical properties from sample sprayed with Graco Foam Cat 200 @ 2000 psi minimum, with Gusmer GX7-400 mechanical purge gun @ 150-160°F. Different machine and parameter will change these properties. User should perform their own independent testing as properties are approximate.)

should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand.

Steel (Atmospheric and Immersion Exposure):
Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:
Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:
Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:
Clean and degrease any contaminated surfaces. Do not blast galvanized surfaces with an abrasive grit.

Fiberglass Reinforced Plastic:
The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:
Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:
Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:
Stainless steel may be grit blasted and degreased. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:
Blast with a steel grit and degrease. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:
An adhesion test is recommended prior to starting the project.

MIXING
Polyeuro® MPL 55 may not be diluted under any circumstances. Thoroughly mix Polyeuro® MPL 55 Part-B (Resin side) with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION
Both Part-A and Part-B material should be preconditioned at 80-90°F before application.

Recommended surface temperature must be at least 5°F above the dew point.

Polyeuro® MPL 55 should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor, Glass Craft or other equivalent machine may be used.

Both Part-A and Part-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 150°F. Adequate pressure and temperature should be maintained at all times.

Polyeuro® MPL 55 should be sprayed in smooth, multidirectional passes to improve uniform thickness and appearance.

EQUIPMENT CLEAN UP
Equipment should be cleaned with an environmentally safe, urethane-grade solvent (alcohol free) as permitted under local regulations immediately after use.

STORAGE
Polyeuro® MPL 55 has a shelf life of six (6) months from date of manufacture, in factory-sealed containers.

Part-A and Part-B drums must be stored above 60°F.

Avoid freezing temperatures.

Store drums on wooden pallets to avoid direct contact with the ground.

If stored for a long period of time, rotate Part-A and Part-B drums regularly.

LIMITATIONS
Do not open until ready to use.

Both Part-A and Part-B containers must be fitted with a desiccant device during use.

WARNING
This product contains Isocyanates and Curative Material.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® 5502

Two Component Aromatic Polyurea Protective Coating

DESCRIPTION

Polyeuro® 5502 is a fast setting, rapid curing, 100% solids, flexible, aromatic, two component spray polyurea that can be applied to suitably prepared concrete and metal surfaces. Its extremely fast gel time makes it suitable for applications down to -20°F. It may be applied in single or multiple applications without appreciable sagging and is relatively insensitive to moisture and temperature allowing application in most temperatures. Polyeuro® 5502 offers a tack free time of less than sixty seconds and exhibits 450% elongation upon curing with 50 Shore D hardness.

FEATURES

- ❖Zero VOC (100% Solids)
- ❖Excellent Thermal Stability
- ❖Low Temperature Flexibility
- ❖Good Chemical Resistance
- ❖Seamless
- ❖Odorless
- ❖Meets USDA Criteria
- ❖Coats Carbon or Mild Steel Metals without Primer
- ❖Installed With or Without Reinforcement in Transitional Areas

TYPICAL USES

- ❖Airports
- ❖Refineries
- ❖Fertilizer Plants
- ❖Mining Operations
- ❖Food Processing Plants
- ❖Marine Environments
- ❖Secondary Containment
- ❖Walkways and Balconies
- ❖Power Plants
- ❖Structural Steel
- ❖Warehouse Floors
- ❖Cold Storage Facilities
- ❖Landfill Containment
- ❖Paper and Pulp Mills
- ❖Parking Garage Decks
- ❖Water and Waste Water Treatment
- ❖Industrial and Manufacturing Facilities

COLORS

Clear/Neutral. Custom colors are available upon request. Color Packs, when used, must be added to Part-B.

Due to its aromatic composition, Polyeuro® 5502 will tend to yellow or darken in color and will become flat after exposure to UV light. Polyeuro® 5502 may be topcoated within twelve hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish.

PACKAGING

10 gallon kit: 5 gallons Part-A (Isocyanate side) and 5 gallons Part-B (Resin side).

100 gallon kit: 50 gallons Part-A (Isocyanate side) and 50 gallons Part-B (Resin side).

COVERAGE

Polyeuro® 5502 may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

TECHNICAL DATA

Mix Ratio by Volume	1A : 1B
Pot Life @ 150°F	4 - 8 secs
Tack Free Time (thickness & substrate temperature dependent)	45 - 60 secs
Recoat Time	0 - 6 hours
Viscosity at 150-160°F (66.5-71°C), Brookfield:	
Part-A	50 ± 20 cps
Part-B	50 ± 20 cps
Density (Side A & B Combined)	8.81 lbs/gal
Flash Point	> 200°F
Hardness, ASTM D-2240	50 ± 5 D
Tensile, ASTM D-412*	3500 ± 200 psi
Elongation, ASTM D-412*	450% ± 50%
Tear, ASTM D-412*	450 ± 50 pli
Service Temperature	-40°F to 250°F
Water Vapor Permeability, ASTM E-96	0.361 perm-inch
VOC Content	0 gm/lit
Recommended Applied Thickness	> 2 mm
Return to Service: Foot Traffic	1 - 4 hours
Return to Service: Full Service	> 24 hours
Taber Abrasion Resistance, ASTM D4060 (CS17 wheel, 1000 cycles, 1 kg load) (maximum)	6 mg loss
Water Absorption, ASTM D471 (maximum 23°C, 24 hours)	< 0.5%
Crack Bridging, ASTM C836 (-25°C, 1.6mm crack, 25 cycles)	Pass
Impact Resistance @ 25°C (ASTM G14)	> 200 lbs
Pull-Off Strength (minimum), ASTM D4541:	
Inter-Coat Adhesion (within recoat time)	Excellent
Concrete (Shot blasted profile), substrate failure occurred	> 500 psi
Concrete (Primed), substrate failure occurred	> 500 psi
Steel (90 um blast profile)	> 900 psi
Lineal Shrinkage	1 - 2%
Flexibility (1/8" 3mm Mendrel Bend Test), ASTM D1737	Pass
Resistance to Weathering, ASTM G-23 (Type QUV Weatherometer-3000 hrs exposure)	No cracking or blistering. Color change, gloss reduction & chalking are noted.

(*These physical properties from sample sprayed with Graco Foam Cat 200 @ 2000 psi minimum, with Gusmer GX7-400 mechanical purge gun @ 150-160°F. Different machine and parameter will change these properties. User should perform their own independent testing as properties are approximate.)

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

New and Old Concrete:
Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:
ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete
ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 - Concrete surface preparation

Wood:
All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):
Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:
Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:
Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:
Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:
The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:
Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:
Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:
Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:
Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:
An adhesion test is recommended prior to starting the project.

MIXING
Polyeuro® 5502 may not be diluted under any circumstances. Thoroughly mix Polyeuro® 5502 Part-B (Resin side) with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION
Both Side-A and Side-B materials should be preconditioned to 75-80°F before application.
Recommended surface temperature must be at least 5°F above the dew point.
Polyeuro® 5502 should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor, Glass Craft or other equivalent machine may be used.
Both Part-A and Part-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 150°F. Adequate pressure and temperature should be maintained at all times.
Polyeuro® 5502 should be sprayed in smooth, multidirectional passes to improve uniform thickness and appearance.

STORAGE
Polyeuro® 5502 has a shelf life of one (1) year from date of manufacture, in factory-sealed containers.
Part-A and Part-B drums are recommended to be stored above 60°F. Avoid freezing temperatures.
Store drums on wooden pallets to avoid direct contact with the ground.
If stored for a long period of time, rotate Part-A and Part-B drums regularly.

LIMITATIONS
Do not open until ready to use.
Both Part-A and Part-B containers must be fitted with a desiccant device during use.

WARNING
This product contains Isocyanates and Curative Material.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® 5502F

Two Component Aromatic Polyurea Protective Coating

DESCRIPTION

Polyeuro® 5502F is a fast set, rapid curing, 100% solids, flexible, aromatic, two component spray polyurea that can be applied to suitably prepared concrete and metal surfaces. Its extremely fast gel time makes it suitable for applications down to -20°F (-29°C). It may be applied in single or multiple applications without appreciable sagging and is relatively insensitive to moisture and temperature allowing application in most temperatures. Polyeuro® 5502F offers a tack free time of less than forty seconds and exhibits 425% elongation upon curing with 50 Shore D hardness.

FEATURES

- ❖Zero VOC (100% Solids)
- ❖Excellent Thermal Stability
- ❖Low Temperature Flexibility
- ❖Good Chemical Resistance
- ❖Seamless
- ❖Odorless
- ❖Meets USDA Criteria
- ❖Coats Carbon or Mild Steel Metals without Primer
- ❖Installed With or Without Reinforcement in Transitional Areas

TYPICAL USES

- ❖Airports
- ❖Refineries
- ❖Fertilizer Plants
- ❖Mining Operations
- ❖Food Processing Plants
- ❖Marine Environments
- ❖Secondary Containment
- ❖Walkways and Balconies
- ❖Power Plants
- ❖Structural Steel
- ❖Warehouse Floors
- ❖Cold Storage Facilities
- ❖Landfill Containment
- ❖Paper and Pulp Mills
- ❖Parking Garage Decks
- ❖Water and Waste Water Treatment
- ❖Industrial and Manufacturing Facilities

COLORS

Neutral. Custom colors are available upon request.

Due to its aromatic composition, Polyeuro® 5502F will tend to yellow or darken in color and will become flat after exposure to UV light. Polyeuro® 5502F may be topcoated with an aliphatic polyurethane/polyurea coating for a colorfast finish.

PACKAGING

100 gallon kit: 50 gallons Part-A (Isocyanate side) and 50 gallons Part-B (Resin side).

COVERAGE

Polyeuro® 5502F may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

New and Old Concrete:

Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient

TECHNICAL DATA

Mix Ratio by Volume	1A : 1B
Pot Life @ 150°F	2 - 4 secs
Tack Free Time (thickness & substrate temperature dependent)	20 - 40 secs
Recoat Time	0 - 6 hours
Viscosity at 150-160°F (66.5-71°C), Brookfield:	
Part-A	50 ± 20 cps
Part-B	50 ± 20 cps
Density (Side A & B Combined)	8.9 lbs/gal
Flash Point	> 200°F
Hardness, ASTM D-2240	53 ± 5 D
Tensile, ASTM D-412*	3500 ± 200 psi
Elongation, ASTM D-412*	250% ± 50%
Tear, ASTM D-412*	450 ± 50 pli
Service Temperature	-40°F to 250°F
Water Vapor Permeability, ASTM E-96	0.361 perm-inch
VOC Content	0 gm/lit
Recommended Applied Thickness	> 2 mm
Return to Service: Foot Traffic	1 - 4 hours
Return to Service: Full Service	> 24 hours
Taber Abrasion Resistance, ASTM D4060 (CS17 wheel, 1000 cycles, 1 kg load) (maximum)	6 mg loss
Water Absorption, ASTM D471 (maximum 23°C, 24 hours)	< 0.5%
Crack Bridging, ASTM C836 (-25°C, 1.6mm crack, 25 cycles)	Pass
Impact Resistance @ 25°C (ASTM G14)	> 200 lbs
Pull-Off Strength (minimum), ASTM D4541:	
Inter-Coat Adhesion (within recoat time)	Excellent
Concrete (Shot blasted profile), substrate failure occurred	> 500 psi
Concrete (Primed), substrate failure occurred	> 500 psi
Steel (90 um blast profile)	> 900 psi
Lineal Shrinkage	1 - 2%
Flexibility (1/8" 3mm Mendrel Bend Test), ASTM D1737	Pass
Resistance to Weathering, ASTM G-23 (Type QUV Weatherometer-3000 hrs exposure)	No cracking or blistering. Color change, gloss reduction & chalking are noted.

(*These physical properties from sample sprayed with Graco Foam Cat 200 @ 2000 psi minimum, with Gusmer GX7-400 mechanical purge gun @ 150-160°F. Different machine and parameter will change these properties. User should perform their own independent testing as properties are approximate.)

profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:

ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete
ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 - Concrete surface preparation

Wood:

All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):

Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:

Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:

Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:

Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:

The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:

Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:

Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:

Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:

Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:

An adhesion test is recommended prior to starting the project.

MIXING

Polyeuro® 5502F may not be diluted under any circumstances. Thoroughly mix Polyeuro® 5502F Part-B (Resin side) with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION

Both Side-A and Side-B materials should be preconditioned to 75-80°F before application.

Recommended surface temperature must be at least 5°F above the dew point.

Polyeuro® 5502F should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor, Glass Craft or other equivalent machine may be used.

Both Part-A and Part-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 150°F. Adequate pressure and temperature should be maintained at all times.

Polyeuro® 5502F should be sprayed in smooth, multidirectional passes to improve uniform thickness and appearance.

STORAGE

Polyeuro® 5502F has a shelf life of one (1) year from date of manufacture, in factory-sealed containers.

Part-A and Part-B drums are recommended to be stored above 60°F. Avoid freezing temperatures.

Store drums on wooden pallets to avoid direct contact with the ground.

If stored for a long period of time, rotate Part-A and Part-B drums regularly.

LIMITATIONS

Do not open until ready to use.

Both Part-A and Part-B containers must be fitted with a desiccant device during use.

WARNING

This product contains Isocyanates and Curative Material.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® 5602

Two Component Aromatic Polyurea Protective Coating Technical Data Sheet

DESCRIPTION

Polyeuro® 5602 is a fast setting, rapid curing, 100% solids, flexible, aromatic, two component spray polyurea that can be applied to suitably prepared concrete and metal surfaces. Its extremely fast gel time makes it suitable for applications down to -20°F. It may be applied in single or multiple applications without appreciable sagging and is relatively insensitive to moisture and temperature allowing application in most temperatures. Polyeuro® 5602 offers a tack free time of less than thirty seconds and exhibits 300% elongation upon curing with 60 Shore D hardness.

FEATURES

- ❖Excellent Thermal Stability
- ❖No Toxic Vapors
- ❖Meets USDA Criteria
- ❖Seamless
- ❖Low Temperature
- ❖Zero VOC
- ❖Odorless
- ❖100% Solids
- ❖Low Permeance Rate
- ❖Non-Reactive
- ❖Good Chemical Resistance
- ❖Coats Carbon or Mild Steel Metals without Primer
- ❖Installed With or Without Reinforcement in Transitional Areas

TYPICAL USES

- ❖Airports
- ❖Refineries
- ❖Fertilizer Plants
- ❖Mining Operations
- ❖Food Processing Plants
- ❖Secondary Containment
- ❖Walkways and Balconies
- ❖Power Plants
- ❖Structural Steel
- ❖Warehouse Floors
- ❖Cold Storage Facilities
- ❖Paper and Pulp Mills
- ❖Marine Environments
- ❖Dump Trucks
- ❖Water and Waste Water Treatment
- ❖Industrial and Manufacturing Facilities

COLORS

Clear/Neutral or Black. Custom colors are available upon request. Color Packs, when used, must be added to Part-B (Resin side).

Due to its aromatic composition, Polyeuro® 5602 will tend to yellow or darken in color and will become flat after exposure to UV light. Polyeuro® 5602 may be topcoated within twelve hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish.

PACKAGING

10 gallon kit: 5 gallons Part-A (Isocyanate side) and 5 gallons Part-B (Resin side).

100 gallon kit: 50 gallons Part-A (Isocyanate side) and 50 gallons Part-B (Resin side).

COVERAGE

Polyeuro® 5602 may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

TECHNICAL DATA

Mix Ratio by Volume	1A : 1B
Pot Life @ 150°F	2-4 seconds
Tack Free Time	15-30 seconds
Recoat Time	0-12 hours
Viscosity at 150-160°F (66.5-71°C), Brookfield:	
Part-A	120 ± 20 cps
Part-B	40 ± 20 cps
Density (Side A & B Combined)	8.9 lbs/gal
Flash Point	>200°F
Hardness, ASTM D-2240*	60 ± 5 D
Tensile Strength, ASTM D-412*	2800 ± 200 psi
Elongation, ASTM D-412*	300 ± 20%
Tear, Die “C” ASTM D-412*	285 ± 50 pli
Service Temperature	-40°F to 250°F

(*These physical properties from sample sprayed with Graco Foam Cat 200 @ 2000 psi minimum, with Gusmer GX7-400 mechanical purge gun @ 150-160°F. Different machine and parameter will change these properties. User should perform their own independent testing as properties are approximate.)

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

New and Old Concrete:

Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:

ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete

ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 - Concrete surface preparation

Wood:
All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):
Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:
Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:
Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:
Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:
The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:
Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:
Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:
Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:
Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:
An adhesion test is recommended prior to starting the project.

MIXING

Polyeuro® 5602 may not be diluted under any circumstances. Thoroughly mix Polyeuro® 5602 Part-B material with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION

Both Part-A and Part-B material should be preconditioned at 80-90°F before application.

Recommended surface temperature must be at least 5°F above the dew point.

Polyeuro® 5602 should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor, Glass Craft or other equivalent machine may be used.

Both Part-A and Part-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 150°F. Adequate pressure and temperature should be maintained at all times.

Polyeuro® 5602 should be sprayed in smooth, multidirectional passes to improve uniform thickness and appearance.

STORAGE

Polyeuro® 5602 has a shelf life of six (6) months from date of manufacture in original, factory-sealed containers.

Avoid exposure to freezing temperatures.

Store drums on wooden pallets to avoid direct contact with the ground.

If stored for a long period of time, rotate Part-A and Part-B drums regularly.

LIMITATIONS

Do not open until ready to use.

Both Part-A and Part-B containers must be fitted with a desiccant device during use.

WARNING

This product contains Isocyanates and Curative Material.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® 5901

Two Component Aromatic Polyurea Protective Coating

DESCRIPTION

Polyeuro® 5901 is a fast set, rapid curing, 100% solids, flexible, aromatic, two component spray polyurea that can be applied to suitably prepared concrete and metal surfaces. Its extremely fast gel time makes it suitable for applications down to -20°F. It may be applied in single or multiple applications without appreciable sagging and is relatively insensitive to moisture and temperature allowing application in most temperatures.

FEATURES

- ❖Excellent Thermal Stability
- ❖No Toxic Vapors
- ❖Meets USDA Criteria
- ❖Seamless
- ❖Low Temperature Flexibility
- ❖Good Chemical Resistance
- ❖Excellent Color Retention
- ❖Coats Most Metals without Primer
- ❖Installed With or Without Reinforcement in Transitional Areas
- ❖Zero VOC
- ❖Odorless
- ❖100% Solids
- ❖Low Permeance Rate
- ❖Non-Reactive

TYPICAL USES

- ❖Airports
- ❖Refineries
- ❖Fertilizer Plants
- ❖Mining Operations
- ❖Food Processing Plants
- ❖Marine Environments
- ❖Secondary Containment
- ❖Walkways and Balconies
- ❖Water and Waste Water Treatment
- ❖Industrial and Manufacturing Facilities
- ❖Power Plants
- ❖Structural Steel
- ❖Warehouse Floors
- ❖Cold Storage Facilities
- ❖Landfill Containment
- ❖Paper and Pulp Mills
- ❖Parking Garage Decks

COLORS

Clear/Neutral. Custom colors are available upon request. Color Packs, when used, must be added to Part-B.

Due to its aromatic composition, Polyeuro® 5901 will tend to yellow or darken in color and will become flat after exposure to UV light. Polyeuro® 5901 may be topcoated within twelve hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish.

PACKAGING

10 gallon kit: 5 gallons Part-A (Isocyanate side) and 5 gallons Part-B (Resin side).

100 gallon kit: 50 gallons Part-A (Isocyanate side) and 50 gallons Part-B (Resin side).

COVERAGE

Polyeuro® 5901 may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

TECHNICAL DATA

Mix Ratio by Volume	1A : 1B
Pot Life @ 150°F	3 - 5 secs
Tack Free Time	60 - 120 secs
Recoat Time	0 - 6 hours
Viscosity at 150-160°F (66.5-71°C), Brookfield:	
Part-A	50 ± 20 cps
Part-B	50 ± 20 cps
Density (Side A & B Combined)	8.75 lbs/gal
Flash Point	> 200°F
Hardness, ASTM D-2240*	85 ± 5 A
Tensile, ASTM D-412*	3000 ± 200 psi
Elongation, ASTM D-412*	650% ± 50%
Tear, ASTM D-412*	450 ± 50 pli
Service Temperature	-40°F to 300°F
Water Vapor Permeability, ASTM E-96	0.00042 gm/hr · in^2
VOC Content	0 gm/lit
Recommended Applied Thickness	> 2 mm
Return to Service: Foot Traffic	1 - 4 hours
Return to Service: Full Service	10 - 24 hours
Taber Abrasion Resistance, ASTM D-4060 (CS17 wheel, 1000 cycles, 1 kg load) (maximum)	28.1 mg loss
Water Absorption, ASTM D471 (max 23°C, 24 hrs)	< 0.5%
Crack Bridging, ASTM C836 (-25°C, 1.6mm crack, 25 cycles)	Pass
Impact Resistance @ 25°C	> 200 lbs
Pull-Off Strength (minimum), ASTM D-4541:	
Inter-Coat Adhesion (within recoat time)	Excellent
Concrete (Shot blast and primed profile), substrate failure occurred	> 500 psi
Steel (75-100 micron blast profile)	> 900 psi
Lineal Shrinkage	1 - 2%
Flexibility 1/8"(3mm) Mandrel Bend Test, ASTM D1737	Pass
Resistance to Weathering, ASTM G-23 (Type DH Weatherometer-2000 hrs exposure)	No cracking or blistering. Color change, gloss reduction & chalking are noted.

(*These physical properties from sample sprayed with Graco Foam Cat 200 @ 2000 psi minimum, with Gusmer GX7-400 mechanical purge gun @ 150-160°F. Different machine and parameter will change these properties. User should perform their own independent testing as properties are approximate.)

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the

potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

New and Old Concrete:
Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:
ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete
ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 - Concrete surface preparation

Wood:
All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):
Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:
Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:
Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:
Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:
The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:
Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:
Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:
Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:
Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:
An adhesion test is recommended prior to starting the project.

MIXING
Polyeuro® 5901 may not be diluted under any circumstances. Use appropriate cleaner for purge line and flushing of equipment and if spraying stops for periods exceeding the pot life of the material. Thoroughly mix Polyeuro® 5901 Part-B (Resin side) with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION
Both Side-A and Side-B materials should be preconditioned to 75-80°F before application.
Recommended surface temperature must be at least 5°F above the dew point.
Polyeuro® 5901 should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor, Glass Craft or other equivalent machine may be used.
Both Part-A and Part-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 150°F. Adequate pressure and temperature should be maintained at all times.
Polyeuro® 5901 should be sprayed in smooth, multidirectional passes to improve uniform thickness and appearance.

STORAGE
Polyeuro® 5901 has a shelf life of six (6) months from date of manufacture, in factory-sealed containers.
Part-A and Part-B drums are recommended to be stored above 60°F. Avoid freezing temperatures.
Store drums on wooden pallets to avoid direct contact with the ground.
If stored for a long period of time, rotate Part-A and Part-B drums regularly.

LIMITATIONS
Do not open until ready to use.
Both Part-A and Part-B containers must be fitted with a desiccant device during use.

WARNING
This product contains Isocyanates and Curative Material.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® 6881

Developed for Broadcast Aggregate Polyurea Protective Coating Technical Data Sheet

DESCRIPTION

Polyeuro® 6881 is a relatively slow setting, 100% solids, flexible, two component spray polyurea that can be applied to suitably prepared concrete and metal surfaces. Its relatively slow curing makes it suitable for application as a waterproofing decking system with enough open time to broadcast an aggregate. It may be applied in single or multiple applications on horizontal surfaces and is relatively insensitive to moisture and temperature allowing application in most temperatures. Polyeuro® 6881 offers a tack free time of eight to fifteen minutes and exhibits 375% elongation upon curing with 90 Shore A hardness.

FEATURES

- ❖Enough open time to broadcast an aggregate
- ❖Zero VOC
- ❖No Toxic Vapors
- ❖Odorless
- ❖Meets USDA Criteria
- ❖100% Solids
- ❖Seamless
- ❖Low Permeance Rate
- ❖Low Temperature Flexibility
- ❖Non-Reactive
- ❖Good Chemical Resistance
- ❖Excellent Thermal Stability
- ❖Installed With or Without Reinforcement in Transitional Areas

TYPICAL USES

- ❖Airports
- ❖Parking Garage Decks
- ❖Warehouse Floors
- ❖Walkways and Balconies
- ❖Mining Operations
- ❖Food Processing Plants
- ❖Landfill Containment
- ❖Water and Waste Water Treatment

COLORS

Clear/Neutral. Custom colors are available upon request. Color Packs, when used, must be added to Part-B.

Due to its aromatic composition, Polyeuro® 6881 will tend to yellow or darken in color and will become flat after exposure to UV light. Polyeuro® 6881 may be topcoated within twelve hours of application with an aliphatic polyurethane/ polyurea coating for a colorfast finish.

PACKAGING

10 gallon kit: 5 gallons Part-A (Isocyanate side) and 5 gallons Part-B (Resin side).

100 gallon kit: 50 gallons Part-A (Isocyanate side) and 50 gallons Part-B (Resin side).

COVERAGE

Polyeuro® 6881 may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

New and Old Concrete:

Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:

ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete
ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 - Concrete surface preparation

TECHNICAL DATA

Mix Ratio by Volume	1A : 1B
Gel Time @ 150°F	2-4 minutes
Tack Free Time (75 mils)	8-15 minutes
Recoat Time	0-12 hours
Viscosity at 150-160°F (66.5-71°C), Brookfield:	
Part-A	250 ± 75 cps
Part-B	40 ± 20 cps
Density (Side A & B Combined)	8.75 lbs/gal
Flash Point	>200°F
Hardness, ASTM D-2240*	90 ± 5 A
Tensile, ASTM D-412*	1900 ± 150 psi
Elongation, ASTM D-412*	375% ± 25%
Tear, Die “C” ASTM D-624*	300 ± 25 pli
Service Temperature	-40°F to 250°F

(*These physical properties from sample sprayed with Graco Foam Cat 200 @ 2000 psi minimum, with Gusmer GX7-400 mechanical purge gun @ 150-160°F. Different machine and parameter will change these properties. User should perform their own independent testing as properties are approximate.)

Wood:
All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):
Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:
Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:
Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:
Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:
The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:
Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:
Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:
Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:
Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:
An adhesion test is recommended prior to starting the project.

MIXING
Polyeuro® 6881 may not be diluted under any circumstances. Use appropriate cleaner for purge line and flushing of equipment and if spraying stops for periods exceeding the pot life of the material. Thoroughly mix Polyeuro® 6881 Part-B (Resin side) with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION
Both Side-A and Side-B materials should be preconditioned to 80-90°F before application.
Recommended surface temperature must be at least 5°F above the dew point.
Polyeuro® 6881 should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor, Glass Craft or other equivalent machine may be used.
Both Part-A and Part-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 150°F. Adequate pressure and temperature should be maintained at all times.
Polyeuro® 6881 should be sprayed in smooth, multidirectional passes to improve uniform thickness and appearance.

STORAGE
Polyeuro® 6881 has a shelf life of six (6) months from date of manufacture, in factory-sealed containers.
Part-A and Part-B drums are recommended to be stored above 60°F.
Avoid freezing temperatures.
Store drums on wooden pallets to avoid direct contact with the ground.
If stored for a long period of time, rotate Part-A and Part-B drums regularly.

LIMITATIONS
Do not open until ready to use.
Both Part-A and Part-B containers must be fitted with a desiccant device during use.

WARNING
This product contains Isocyanates and Curative Material.

This product is considered Dangerous Goods. DOT regulations classify it as:

Part-A: TOXIC LIQUID, organic, N.O.S. (Isophorone Diisocyanate), Class 6.1, UN 2810, PG III, TOXIC

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® 7502

Two Component Aliphatic Polyurea Protective Coating Technical Data Sheet

DESCRIPTION

Polyeuro® 7502 is a fast setting, rapid curing, 100% solids, flexible, aliphatic, two component spray polyurea with excellent color retention, that can be applied to suitably prepared interior or exterior concrete and metal surfaces. Its extremely fast gel time makes it suitable for applications down to -20°F. It may be applied in single or multiple applications without appreciable sagging and is relatively insensitive to moisture and temperature allowing application in most temperatures. Polyeuro® 7502 offers a tack free time of less than two minutes and exhibits 220% elongation upon curing with 50 Shore D hardness.

FEATURES

- ❖Excellent Color Retention
- ❖Excellent Thermal Stability
- ❖Low Temperature Flexibility
- ❖Zero VOC (100% Solids)
- ❖Interior or Exterior Applications
- ❖Good Chemical Resistance
- ❖Coats Carbon or Mild Steel Metals without Primer
- ❖Installed With or Without Reinforcement in Transitional Areas
- ❖Odorless
- ❖Seamless
- ❖Meets USDA Criteria

TYPICAL USES

- ❖Airports
- ❖Refineries
- ❖Fertilizer Plants
- ❖Mining Operations
- ❖Food Processing Plants
- ❖Marine Environments
- ❖Secondary Containment
- ❖Walkways and Balconies
- ❖Water and Waste Water Treatment
- ❖Industrial and Manufacturing Facilities
- ❖Power Plants
- ❖Structural Steel
- ❖Warehouse Floors
- ❖Cold Storage Facilities
- ❖Paper and Pulp Mills
- ❖Parking Garage Decks

COLORS

Clear/Neutral. Custom colors are available upon request. Color Packs, when used, must be added to Part-B.

PACKAGING

10 gallon kit: 5 gallons Part-A (Isocyanate side) and 5 gallons Part-B (Resin side).

100 gallon kit: 50 gallons Part-A (Isocyanate side) and 50 gallons Part-B (Resin side).

COVERAGE

Polyeuro® 7502 may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

TECHNICAL DATA

Mix Ratio by Volume	1A : 1B
Pot Life	10 - 15 secs
Tack Free Time	60 - 120 secs
Recoat Time	0 - 6 hours
Viscosity at 150-160°F (66.5-71°C), Brookfield:	
Part-A	120 ± 20 cps
Part-B	40 ± 20 cps
Density (Side A & B Combined)	8.50 lbs/gal
Flash Point	> 200°F
Hardness, ASTM D-2240	50 ± 5 D
Tensile Strength, ASTM D-412*	3300 ± 300 psi
Elongation, ASTM D-412*	220 ± 20%
Tear, ASTM D-412*	400 ± 20 pli
Service Temperature	-40°F to 300°F
VOC Content	0 gm/lit
Recommended Applied Thickness	> 2 mm
Return to Service:	
Foot Traffic	2 - 4 hours
Full Service	12 - 24 hours
Taber Abrasion Resistance, ASTM D4060 (CS17 wheel, 1000 cycles, 1 kg load)(maximum)	33 mg loss
Water Absorption, ASTM D471 (maximum 23°C, 24 hours)	< 0.5%
Crack Bridging, ASTM C836 (-25°C, 1.6mm crack, 25 cycles)	Pass
Pull-Off Strength (minimum), ASTM D4541:	
Inter-Coat Adhesion (within recoat time)	Excellent
Concrete (Shot blasted profile), substrate failure occurred	> 500 psi
Concrete (Primed), substrate failure occurred	> 500 psi
Steel (90 um blast profile)	> 900 psi
Lineal Shrinkage	1 - 2%
Flexibility (1/8" 3mm Mendrel Bend Test), ASTM D1737	Pass
Resistance to Weathering, ASTM G-23 (Type QUV Weatherometer-2000 hrs exposure)	No cracking, blistering. Gloss reduction & minor chalking are noted.

(*These physical properties from sample sprayed with Graco Foam Cat 200 @ 2000 psi minimum, with Gusmer GX7-400 mechanical purge gun @ 150-160°F. Different machine and parameter will change these properties. User should perform their own independent testing as properties are approximate.)

New and Old Concrete:
Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:
ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete
ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 - Concrete surface preparation

Wood:
All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):
Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:
Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:
Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:
Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:
The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:
Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:
Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:
Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:
Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:
An adhesion test is recommended prior to starting the project.

MIXING
Polyeuro® 7502 may not be diluted under any circumstances. Thoroughly mix Polyeuro® 7502 Part-B (Resin side) with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION
Both Part-A and Part-B material should be preconditioned at 80-90°F before application.
Recommended surface temperature must be at least 5°F above the dew point.
Polyeuro® 7502 should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor, Glass Craft or other equivalent machine may be used.
Both Part-A and Part-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 150°F. Adequate pressure and temperature should be maintained at all times.
Polyeuro® 7502 should be sprayed in smooth, multidirectional passes to improve uniform thickness and appearance.

STORAGE
Polyeuro® 7502 has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers.
Avoid freezing temperatures.
Store drums on wooden pallets to avoid direct contact with the ground.
If stored for a long period of time, rotate Part-A and Part-B drums regularly.

LIMITATIONS
Do not open until ready to use.

WARNING
This product contains Isocyanates and Curative Material.
This product is considered Dangerous Goods. DOT regulations classify it as:
Part-A: TOXIC LIQUID, organic, N.O.S. (Isophorone Diisocyanate), Class 6.1, UN 2810, PG III, TOXIC
Part-B: AMINES, liquid, corrosive, N.O.S (polyoxypropylenediamine), Class 8, UN 2735, PG III, CORROSIVE

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® 7901

Two Component Aliphatic Polyurea Protective Coating Technical Data Sheet

DESCRIPTION

Polyeuro® 7901 is a fast setting, rapid curing, 100% solids, flexible, aliphatic, color stable, two component spray polyurea that can be applied to suitably prepared interior or exterior concrete and metal surfaces. Its extremely fast gel time makes it suitable for applications down to -20°F. It may be applied in single or multiple applications without appreciable sagging and is relatively insensitive to moisture and temperature allowing application in most temperatures. Polyeuro® 7901 offers a tack free time of less than one minute and exhibits 450% elongation upon curing with 90 Shore A hardness.

FEATURES

- ❖Excellent Color Retention
- ❖Excellent Thermal Stability
- ❖No Toxic Vapors
- ❖Meets USDA Criteria
- ❖Low Temperature Flexibility
- ❖Good Chemical Resistance
- ❖Interior or Exterior Applications
- ❖Coats Most Metals without Primer
- ❖Installed With or Without Reinforcement in Transitional Areas
- ❖Seamless
- ❖Zero VOC
- ❖Odorless
- ❖Low Permeance Rate
- ❖Non-Reactive
- ❖100% Solids

TYPICAL USES

- ❖Airports
- ❖Refineries
- ❖Food Processing Plants
- ❖Mining Operations
- ❖Marine Environments
- ❖Parking Garage Decks
- ❖Walkways and Balconies
- ❖Water and Waste Water Treatment
- ❖Industrial and Manufacturing Facilities
- ❖Power Plants
- ❖Structural Steel
- ❖Fertilizer Plants
- ❖Cold Storage Facilities
- ❖Paper and Pulp Mills
- ❖OEM

COLORS

Clear/Neutral. Custom colors are available upon request. Color Packs, when used, must be added to Part-B.

PACKAGING

10 gallon kit: 5 gallons Part-A (Isocyanate side) and 5 gallons Part-B (Resin side).

100 gallon kit: 50 gallons Part-A (Isocyanate side) and 50 gallons Part-B (Resin side).

COVERAGE

Polyeuro® 7901 may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

TECHNICAL DATA

Mix Ratio by Volume	1A : 1B
Pot Life @160°F	5 - 10 secs
Tack Free Time @ 80-90°F Substrate	40 - 60 secs
Recoat Time	0 - 6 hours
Viscosity at 150-160°F (66.5-71°C), Brookfield:	
Part-A	160 cps
Part-B	40 cps
Density (Side A & B Combined)	8.55 lbs/gal
Flash Point	> 200°F
Hardness, ASTM D-2240	90 ± 5 A
Tensile Strength, ASTM D-412	3200 ± 300 psi
Elongation, ASTM D-412	450 ± 50%
Tear, ASTM D-624	325 ± 50 pli
Service Temperature	-40°F to 250°F
Water Vapor Permeability, ASTM E-96	0.4889 perm-inch
VOC Content	0 gm/lit
Recommended Applied Thickness	> 2 mm
Return to Service: Foot Traffic	2 - 4 hours
Return to Service: Full Service	10 -24 hours
Taber Abrasion Resistance, ASTM D4060 (CS17 wheel, 1000 cycles, 1 kg load)(maximum)	33 mg loss
Water Absorption, ASTM D471 (maximum 23°C, 24 hours)	< 0.5%
Impact Resistance @ 25°C (ASTM G14)	> 200 lbs
Crack Bridging, ASTM C836 (-25°C, 1.6mm crack, 25 cycles)	Pass
Pull-Off Strength (minimum), ASTM D4541:	
Inter-Coat Adhesion (within recoat time)	Excellent
Concrete (Shot blasted profile), substrate failure occurred	> 500 psi
Concrete (Primed), substrate failure occurred	> 500 psi
Steel (90 um blast profile)	> 900 psi
Lineal Shrinkage	1 - 2%
Flexibility (1/8" (3mm) Mendrel Bend Test), ASTM D1737	Pass
Resistance to Weathering, ASTM G-23 (Type QUV Weatherometer-2000 hrs exposure)	No cracking, blistering. Gloss reduction & minor chalking are noted.

(*These physical properties from sample sprayed with Graco Foam Cat 200 @ 2000 psi minimum, with Gusmer GX7-400 mechanical purge gun @ 150-160°F. Different machine and parameter will change these properties. User should perform their own independent testing as properties are approximate.)

New and Old Concrete:
Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:
ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete
ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 - Concrete surface preparation

Wood:
All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):
Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:
Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:
Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:
Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:
The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:
Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:
Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:
Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:
Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:
An adhesion test is recommended prior to starting the project.

MIXING
Polyeuro® 7901 may not be diluted under any circumstances. Thoroughly mix Polyeuro® 7901 Part-B (Resin side) with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION
Both Part-A and Part-B material should be preconditioned at 80-90°F before application.
Recommended surface temperature must be at least 5°F above the dew point.
Polyeuro® 7901 should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor, Glass Craft or other equivalent machine may be used.
Both Part-A and Part-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 150°F. Adequate pressure and temperature should be maintained at all times.
Polyeuro® 7901 should be sprayed in smooth, multidirectional passes to improve uniform thickness and appearance.

STORAGE
Polyeuro® 7901 has a shelf life of six (6) months from date of manufacture in original, factory-sealed containers.
Avoid freezing temperatures.
Store drums on wooden pallets to avoid direct contact with the ground.
If stored for a long period of time, rotate Part-A and Part-B drums regularly.

LIMITATIONS
Do not open until ready to use.

WARNING
This product contains Isocyanates and Curative Material.
This product is considered Dangerous Goods. DOT regulations classify it as:
Part-A: TOXIC LIQUID, organic, N.O.S. (Isophorone Diisocyanate), Class 6.1, UN 2810, PG III, TOXIC
Part-B: AMINES, liquid, corrosive, N.O.S (polyoxypropylenediamine), Class 8, UN 2735, PG III, CORROSIVE

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® MH752

Two Component Aromatic Hybrid Polyurethane Protective Coating Technical Data Sheet

DESCRIPTION

Polyeuro® MH752 is a fast setting, rapid curing, aromatic, two component, hybrid polyurea/polyurethane spray designed to be applied over EPS, wood and many other surfaces. Its excellent balance of stiffness and impact resistance provides excellent plastic "shell-like" protection for delicate foams and EPS. Polyeuro® MH752's chemical design allows fast "user-friendly" application with excellent flow and appearance. Polyeuro® MH752 offers a tensile strength of 3700 psi upon curing with 75 Shore D hardness.

FEATURES

- ❖Plastic "Shell-Like" Protection
- ❖100% Solids
- ❖Meets USDA Criteria
- ❖Excellent Thermal Stability
- ❖Excellent Chemical Protection
- ❖Excellent Cold Temperature Impact Resistance
- ❖Low Shrinkage
- ❖Zero VOC
- ❖Fast Cure
- ❖High Productivity

TYPICAL USES

- ❖Decorations / Props
- ❖Architectural Shapes
- ❖Steel Coating
- ❖Food Processing Plants
- ❖Speaker Boxes
- ❖Dock Flotations
- ❖Wood Pallets / Crates
- ❖Wood Cabinets

COLORS

Clear/Neutral. Custom colors are available upon request. Color Packs, when used, must be added to Part-B.

Due to its aromatic composition, Polyeuro® MH752 will tend to yellow or darken in color and will become flat after exposure to UV light. Polyeuro® MH752 may be topcoated within twelve hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish.

PACKAGING

10 gallon kit: 5 gallons Part-A (Isocyanate side) and 5 gallons Part-B (Resin side).

100 gallon kit: 50 gallons Part-A (Isocyanate side) and 50 gallons Part-B (Resin side).

COVERAGE

Polyeuro® MH752 may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

New and Old Concrete:

Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:

ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete
ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 Concrete surface preparation

Wood:

All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas

TECHNICAL DATA

Mix Ratio by Volume	1A : 1B
Pot Life @ 150°F	2-4 seconds
Tack Free Time (150 mils thick)	60-120 seconds
Recoat Time	0-12 hours
Viscosity at 150-160°F (66.5-71°C), Brookfield:	
Part-A	90 ± 20 cps
Part-B	160 ± 20 cps
Density (Side A & B Combined)	9.03 lbs/gal
Flash Point	>200°F
Hardness, ASTM D-2240	75 ± 5 D
Tensile Strength, ASTM D-412*	3700 ± 200 psi
Elongation, ASTM D-412*	40% ± 20%
Tear, Die "C" ASTM D-624*	450 ± 50 pli
Service Temperature	-20°F to 250°F

(*These physical properties from sample sprayed with Graco Foam Cat 200 @ 2000 psi minimum, with Gusmer GX7-400 mechanical purge gun @ 150-160°F. Different machine and parameter will change these properties. User should perform their own independent testing as properties are approximate.)

should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):
Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:
Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:
Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:
Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:
The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:
Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:
Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:
Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:
Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:
An adhesion test is recommended prior to starting the project.

MIXING
Polyeuro® MH752 may not be diluted under any circumstances. Thoroughly mix Polyeuro® MH752 Part-B material with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION
Both Part-A and Part-B material should be preconditioned at 80-90°F before application.

Recommended surface temperature must be at least 5°F above the dew point.

Polyeuro® MH752 should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor, Glass Craft or other equivalent machine may be used.

Both Part-A and Part-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 150°F. Adequate pressure and temperature should be maintained at all times.

Polyeuro® MH752 should be sprayed in smooth, multidirectional passes to improve uniform thickness and appearance.

STORAGE
Polyeuro® MH752 has a shelf life of six (6) months from date of manufacture in original, factory-sealed containers.

Part-A and Part-B drums are recommended to be stored above 60°F.

Avoid freezing temperatures.

Store drums on wooden pallets to avoid direct contact with the ground.

If stored for a long period of time, rotate Part-A and Part-B drums regularly.

LIMITATIONS
Do not open until ready to use.

Both Part-A and Part-B containers must be fitted with a desiccant device during use.

WARNING
This product contains Isocyanates and Curative Material.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® MH752HH

Two Component Aromatic Hybrid Polyurethane Protective Coating

DESCRIPTION

Polyeuro® MH752HH is a fast set, rapid curing, aromatic, two component hybrid polyurea/polyurethane spray designed to be applied over EPS, wood, and many other surfaces with better heat stability and greater stiffness. Its excellent balance of stiffness and impact resistance provides excellent plastic "shell-like" protection for delicate foams and EPS. Polyeuro® MH752HH's chemical design allows fast "user-friendly" application with excellent flow and appearance. Polyeuro® MH752HH offers a tensile strength of 4000 psi upon curing with 75 Shore D hardness.

FEATURES

- ❖Plastic "Shell-Like" Protection
- ❖100% Solids
- ❖Meets USDA Criteria
- ❖Excellent Thermal Stability
- ❖Excellent Chemical Protection
- ❖Excellent Cold Temperature Impact
- ❖Low Shrinkage
- ❖Zero VOC
- ❖Fast Cure
- ❖High Productivity

TYPICAL USES

- ❖Decorations / Props
- ❖Architectural Shapes
- ❖Steel Coating
- ❖Food Processing Plants
- ❖Faux Rock
- ❖Speaker Boxes
- ❖Dock Flotations
- ❖Wood Pallets / Crates
- ❖Wood Cabinets

COLORS

Clear/Neutral. Custom colors are available upon request. Color Packs, when used, must be added to Part-B.

Due to its aromatic composition, Polyeuro® MH752HH will tend to yellow or darken in color and will become flat after exposure to UV light. Polyeuro® MH752HH may be topcoated within twelve hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish.

PACKAGING

10 gallon kit: One 5 gallon pail of Part-A and one 5 gallon pail of Part-B.

100 gallon kit: One 50 gallon drum of Part-A and one 50 gallon drum of Part-B.

COVERAGE

Polyeuro® MH752HH may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

New and Old Concrete:

Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:

ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete
ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 Concrete surface preparation

TECHNICAL DATA

Mix Ratio by Volume	1A : 1B
Pot Life.	2-4 seconds
Tack Free Time	60-120seconds
Recoat Time	0-12 hours
Viscosity at 150-160°F (66.5-71°C), Brookfield:	
Part-A	100 ± 20 cps
Part-B	160 ± 20 cps
Density (Side A & B Combined)	9.05 lbs/gal
Flash Point	>200°F
Hardness, ASTM D-2240*	75 ± 5 D
Tensile, ASTM 412-C*	4000 ± 200psi
Elongation, ASTM 412-C*	20% ± 5%
Tear, ASTM 624-C*	450 ± 50 pli
Service Temperature	-40°F to 300°F

(*These physical properties from sample sprayed with Graco Foam Cat 200 @ 2000 psi minimum, with Gusmer GX7-400 mechanical purge gun @ 150-160°F. Different machine and parameter will change these properties. User should perform their own independent testing as properties are approximate.)

Wood:
All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):
Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:
Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:
Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:
Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:
The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:
Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:
Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:
Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:
Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:
An adhesion test is recommended prior to starting the project.

MIXING
Polyeuro® MH752HH may not be diluted under any circumstances. Thoroughly mix Polyeuro® MH752HH Part-B (Resin side) with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION
Both Part-A and Part-B material should be preconditioned at 80-90°F before application.

Recommended surface temperature must be at least 5°F above the dew point.

Polyeuro® MH752HH should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor, Glass Craft or other equivalent machine may be used.

Both Part-A and Part-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 150°F. Adequate pressure and temperature should be maintained at all times.

Polyeuro® MH752HH should be sprayed in smooth, multi-directional passes to improve uniform thickness and appearance.

STORAGE
Polyeuro® MH752HH has a shelf life of six (6) months from date of manufacture, in factory-sealed containers.

Part-A and Part-B drums are recommended to be stored above 60°F.

Avoid freezing temperatures.

Store drums on wooden pallets to avoid direct contact with the ground.

If stored for a long period of time, rotate Part-A and Part-B drums regularly.

LIMITATIONS
Do not open until ready to use.

Both Part-A and Part-B containers must be fitted with a desiccant device during use.

WARNING
This product contains Isocyanates and Curative Material.

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POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® MPL 11 FR

Fire Retardant
Two Component Modified
Polyurea Protective Coating

DESCRIPTION

Polyeuro® MPL 11 FR is a Class 1 fire-rated, two component, 1:1, 100% solids, fast set, liquid applied, modified polyurea liner system for metal, concrete, fiberglass and wood surfaces.

FEATURES

- ❖Meets ASTM E-84 Class 1 Fire Test Criteria
- ❖ Seamless
- ❖High Build
- ❖Tough and Elastomeric
- ❖Quick Drying
- ❖Chemical Resistant
- ❖Low Temperature Flexibility
- ❖Abrasion and Impact Resistant

TYPICAL USES

- ❖Truck Bed Surfaces
- ❖Utility Vehicles
- ❖Cargo liners
- ❖Boat Linings
- ❖Waterproof Decking
- ❖Cargo Holds
- ❖Horse Trailers
- ❖Industrial Floorings
- ❖Walkways
- ❖Containment Areas
- ❖Encapsulation of Fiberglass Bodies and Polystyrene Foams

COLOR

Clear/Neutral. Custom colors are available upon request. Color Packs, when used, must be added to Part-B.
Due to its aromatic composition, Polyeuro® MPL 11 FR will tend to yellow or darken in color and will become flat after exposure to UV light. Polyeuro® MPL 11 FR may be topcoated within twelve hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish.

PACKAGING

10 gallon kit: 5 gallons Side-A (Isocyanate side) and 5 gallons Side-B (Resin side).

100 gallon kit: 50 gallons Side-A (Isocyanate side) and 50 gallonsSide-B (Resin side).

COVERAGE

Polyeuro® MPL 11 FR may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

New and Old Concrete:

Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:

ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete
ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 - Concrete surface preparation

Wood:

All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat

TECHNICAL DATA

Mix Ratio, by volume	1A:1B
Pot Life @ 160°F (71°C)	3 - 6 seconds
Tack Free Time (150 mils thick)	10-30 seconds
Recoat Time	0-12 hours
Viscosity @ 150-160°F (65.5-71°C), Brookfield:	
Side-A	150 ± 50 cps
Side-B	200 ± 20 cps
Density (Side-A & B Combined)	13.03 lbs/gal
Flash Point	>200°F
Hardness, ASTM D-2240*	50 ± 5 Shore D
Tensile, ASTM D-412*	1600 ± 200 psi
Elongation, ASTM D-412*	45 ± 20%
Tear, ASTM D-624*	350 ± 20 pli
Service Temperature	-20°F to 250°F

(*These physical properties from sample sprayed with Graco Foam Cat 200 @ 2000 psi minimum, with Gusmer GX7-400 mechanical purge gun @ 150-160°F. Different machine and parameter will change these properties. User should perform their own independent testing as properties are approximate.)

Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):
Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:
Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:
Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:
Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:
The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:
Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:
Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:
Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:
Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:
An adhesion test is recommended prior to starting the project.

MIXING

Polyeuro® MPL 11 FR may not be diluted under any circumstances. Thoroughly mix Polyeuro® MPL 82 Part-A and Part-B with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION

Both Side-A and Side-B materials should be preconditioned to 90-100°F before application.

Both Side-A and Side-B materials should becontinuously agitated before and during application. Agitate at least one hour prior to application using heavy duty drum agitator.

Both Side-A and Side-B lines must have filters removed.

Use a round pattern disc for spraying.

Orifice diameter must be 0.042" or greater.

Recommended surface temperature must be at least 5°F above the dew point.

Polyeuro® MPL 11 FR should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor, Glass Craft or other equivalent machine may be used.

Both Part-A and Part-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 150°F. Adequate pressure and temperature should be maintained at all times.

Polyeuro® MPL 11 FR should be sprayed in smooth, multi-directional passes to improve uniform thickness and appearance.

STORAGE

Polyeuro® MPL 11 FR has a shelf life of six (6) months from date of manufacture, in factory-sealed containers.

Part-A and Part-B drums are recommended to be stored above 60°F.

Avoid freezing temperatures.

Store drums on wooden pallets to avoid direct contact with the ground.

If stored for a long period of time, rotate Part-A and Part-B drums regularly.

LIMITATIONS

Do not open until ready to use.

Both Part-A and Part-B containers must be fitted with a desiccant device during use.

WARNING

This product contains Isocyanates and Curative Material.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® MH752FR

Fire Retardant
Two Component Aromatic Hybrid
Polyurethane Protective Coating

DESCRIPTION

Polyeuro® MH752FR is a Class 1 fire-rated, fast set, rapid curing, aromatic, two component hybrid polyurea/polyurethane spray designed to be applied over EPS, wood, and many other surfaces. Its excellent balance of stiffness and impact resistance provides excellent plastic "shell-like" protection for delicate foams and EPS. Polyeuro® MH752FR's chemical design allows fast "user-friendly" application with excellent flow and appearance.

FEATURES

- ❖Meets ASTM E-84 Class 1 Fire Test Criteria
- ❖Plastic "Shell-Like" Protection
- ❖100% Solids
- ❖Meets USDA Criteria
- ❖Excellent Thermal Stability
- ❖Excellent Chemical Protection
- ❖Excellent Cold Temperature Impact
- ❖Low Shrinkage
- ❖Zero VOC
- ❖Fast Cure
- ❖High Productivity

TYPICAL USES

- ❖Decorations / Props
- ❖Architectural Shapes
- ❖Steel Coating
- ❖Food Processing Plants
- ❖Speaker Boxes
- ❖Dock Flotations
- ❖Wood Pallets / Crates
- ❖Wood Cabinets

COLORS

Clear/Neutral. Custom colors are available upon request. Color Packs, when used, must be added to Part-B.

Due to its aromatic composition, Polyeuro® MH752FR will tend to yellow or darken in color and will become flat after exposure to UV light. Polyeuro® MH752FR may be topcoated within twelve hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish.

PACKAGING

10 gallon kit: One 5 gallon pail of Part-A (Isocyanate side) and one 5 gallon pail of Part-B (Resin side).

100 gallon kit: One 50 gallon drum of Part-A (Isocyanate side) and one 50 gallon drum of Part-B (Resin side).

COVERAGE

Polyeuro® MH752FR may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

New and Old Concrete:

Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:

ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete
ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 - Concrete surface preparation

Wood:

All wood should be clean, dry and free of any knots, splinters,

TECHNICAL DATA

Mix Ratio by Volume	1A : 1B
Pot Life @ 150°F	4 - 6 seconds
Tack Free Time (150 mils thick)	60-120seconds
Recoat Time	0-12 hours
Viscosity at 150-160°F (66.5-71°C), Brookfield:	
Part-A	150 ± 20 cps
Part-B	250 ± 50 cps
Density (Side A & B Combined)	10.89 lbs/gal
Flash Point	>200°F
Hardness, ASTM D-2240*	75 ± 5 D
Tensile, ASTM 412-C*	2500 ± 200psi
Elongation, ASTM 412-C*	10% ± 5%
Tear, ASTM 624-C*	400 ± 30 pli
Service Temperature	-40°F to 300°F

(Results based on lab drawn film)

(*These physical properties from sample sprayed with Graco Foam Cat 200 @ 2000 psi minimum, with Gusmer GX7-400 mechanical purge gun @ 150-160°F. Different machine and parameter will change these properties. User should perform their own independent testing as properties are approximate.)

oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):
Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:
Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:
Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:
Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:
The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:
Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:
Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:
Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:
Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:
An adhesion test is recommended prior to starting the project.

MIXING

Polyeuro® MH752FR may not be diluted under any circumstances. Thoroughly mix Polyeuro® MH752FR Part-A and Part-B with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION

Both Side-A and Side-B materials should be preconditioned to 90-100°F before application.

Both Side-A and Side-B materials should becontinuously agitated before and during application. Agitate at least one hour prior to application using heavy duty drum agitator.

Both Side-A and Side-B lines must have filters removed.

Use a round pattern disc for spraying.

Orifice diameter must be 0.042” or greater.

Recommended surface temperature must be at least 5°F above the dew point.

Polyeuro® MH752FR should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco’s Reactor, Glass Craft or other equivalent machine may be used.

Both Part-A and Part-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 150°F. Adequate pressure and temperature should be maintained at all times.

Polyeuro® MH752FR should be sprayed in smooth, multi-directional passes to improve uniform thickness and appearance.

STORAGE

Polyeuro® MH752FR has a shelf life of one (1) year from date of manufacture, in factory-sealed containers.

Part-A and Part-B drums are recommended to be stored above 60°F.

Avoid freezing temperatures.

Store drums on wooden pallets to avoid direct contact with the ground.

If stored for a long period of time, rotate Part-A and Part-B drums regularly.

LIMITATIONS

Do not open until ready to use.

Both Part-A and Part-B containers must be fitted with a desiccant device during use.

WARNING

This product contains Isocyanates and Curative Material.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® 5502-NSF

Two Component Aromatic Polyurea Protective Coating Technical Data Sheet

DESCRIPTION

Polyeuro® 5502-NSF is ANSI/NSF 61 approved for direct contact with potable water. It is a fast setting, rapid curing, 100% solids, flexible, aromatic, two component spray polyurea that can be applied to suitably prepared concrete and metal surfaces. Its extremely fast gel time makes it suitable for applications down to -20°F. It may be applied in single or multiple applications without appreciable sagging and is relatively insensitive to moisture and temperature allowing application in most temperatures. Polyeuro® 5502-NSF offers a tack free time of less than forty-five seconds and exhibits 450% elongation upon curing with 50 Shore D hardness.

FEATURES

- ANSI/NSF 61 Approved for Potable Water
- Zero VOC (100% Solids)
- Seamless
- Excellent Thermal Stability
- Odorless
- Low Temperature Flexibility
- Meets USDA Criteria
- Good Chemical Resistance
- No Toxic Vapors
- Coat Pipe 9" In Diameter or Greater
- Suitable for 5 Gallon Tanks and Larger
- Coats Carbon or Mild Steel Metals without Primer
- Installed With or Without Reinforcement in Transitional Areas

TYPICAL USES

- Potable Water Tanks - Concrete or Metal
- Potable Water Pipes

COLORS

Clear/Neutral. Custom colors are available upon request. Color Packs, when used, must be added to Part-B.

PACKAGING

10 gallon kit: 5 gallons Part-A (Isocyanate side) and 5 gallons Part-B (Resin side).

100 gallon kit: 50 gallons Part-A (Isocyanate side) and 50 gallons Part-B (Resin side).

COVERAGE

Polyeuro® 5502-NSF may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

TECHNICAL DATA

Mix Ratio by Volume	1A : 1B
Pot Life @ 150°F	3 - 5 secs
Tack Free Time (thickness & substrate temperature dependent)	30 - 45 secs
Recoat Time at 20°C	0 - 6 hours
Viscosity at 150-160°F (66.5-71°C), Brookfield:	
Part-A	50 ± 20 cps
Part-B	50 ± 20 cps
Density (Side A & B Combined)	1.05 kgs/litre
Flash Point	> 93°C (200°F)
Hardness, ASTM D-2240	50 ± 5 D
Tensile, ASTM D-412*	3500 ± 200 psi
Elongation, ASTM D-412*	450% ± 50%
Tear, Die "C" ASTM D-412*	450 ± 50 pli
Service Temperature	-40°C to 120°C
Water Vapor Permeability ASTM E-96	0.361 perm-inch
VOC Content	0%
Recommended Applied Thickness	> 2mm
Return to Service:	
Foot Traffic	1-4 hours
Full Service (dependent on substrate and ambient temperatures)	> 24 hours
Taber Abrasion Resistance, ASTM D-4060 (CS17 wheel, 1000 cycles, 1 kg load) (maximum)	6 mg loss
Water Absorption, ASTM D471 (max 23°C, 24 hrs)	< 0.5%
Crack Bridging, ASTM C836 (-25°C, 1.6mm crack, 25 cycles)	Pass
Impact Resistance @ 25°C	> 200 lbs
Pull-Off Strength (minimum), ASTM D-4541:	
Inter-Coat Adhesion (within recoat time)	Excellent
Concrete (Shot blast profile), substrate failure occurred	> 500 psi
Concrete (Primed), substrate failure occurred	> 500 psi
Steel (75-100 micron blast profile)	> 900 psi
Lineal Shrinkage	1 - 2%
Flexibility 1/8"(3mm) Mandrel Bend Test, ASTM D1737	Pass
Resistance to Weathering, ASTM G-23 (Type QUV Weatherometer-3000 hrs exposure)	No cracking or blistering. Color change, gloss reduction & chalking are noted.
Potable Water Certification - US, ANSI NSF-61	Pass
Potable Water Certification - Australian Water Quality Centre, AS/NZS 4020 (certificate number 4007/92.1060)	Pass

(*These physical properties from sample sprayed with Graco Foam Cat 200 @ 2000 psi minimum, with Gusmer GX7-400 mechanical purge gun @ 150-160°F. Different machine and parameter will change these properties. User should perform their own independent testing as properties are approximate.)

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

New and Old Concrete:
Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:
ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete
ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 - Concrete surface preparation

Wood:
All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):
Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:
Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:
Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:
Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:
The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:
Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:
Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:
Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:
Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:
An adhesion test is recommended prior to starting the project.

MIXING
Polyeuro® 5502-NSF may not be diluted under any circumstances. Thoroughly mix Polyeuro® 5502-NSF Part-B (Resin side) with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION
Both Side-A and Side-B materials should be preconditioned to 75-80°F before application.
Recommended surface temperature must be at least 5°F above the dew point.
Polyeuro® 5502-NSF should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor, Glass Craft or other equivalent machine may be used.
Both Part-A and Part-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 150°F. Adequate pressure and temperature should be maintained at all times.
Polyeuro® 5502-NSF should be sprayed in smooth, multidirectional passes to improve uniform thickness and appearance.

STORAGE
Polyeuro® 5502-NSF has a shelf life of one (1) year from date of manufacture, in factory-sealed containers.
Part-A and Part-B drums are recommended to be stored above 60°F. Avoid freezing temperatures.
Store drums on wooden pallets to avoid direct contact with the ground.
If stored for a long period of time, rotate Part-A and Part-B drums regularly.

LIMITATIONS
Do not open until ready to use.
Both Part-A and Part-B containers must be fitted with a desiccant device during use.

WARNING
This product contains Isocyanates and Curative Material.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® 1050H

Polyurea Polyurethane Copolymer Protective Coating Technical Data Sheet

DESCRIPTION

Polyeuro® 1050H has NSF-61 approval for direct contact with potable water, and is recommended for use as a coating or lining on suitably primed carbon steel, non-ferrous metal and concrete. Polyeuro® 1050H offers a tack free time of less than five minutes and exhibits 20-30% elongation upon curing with 65 Shore D hardness.

FEATURES

- ANSI/NSF 61 Approved for Potable Water
- High Build, Quick Dry
- Chemical Resistant
- Low Temperature Flexibility
- 100% Solids
- Abrasion and Impact Resistant
- Horizontal Surface Application
- Plural Component Spray Application

TYPICAL USES

- Petrochemical Plants
- Mining
- Pipe Lining and Repair
- Power Plants
- Pulp and Paper Plants
- Man Holes
- Secondary Containment
- Pen Stocks
- Concrete/Steel Water Storage Tanks
- Water and Wastewater Treatment Plants

TYPICAL SYSTEMS

Carbon Steel
Primer: Polyprime 3042
Finish: Polyeuro® 1050H

Concrete
Primer: Polyprime 3042
Finish: Polyeuro® 1050H

Refer to Specification Guide for further detail.

COLOR

Off-white with a medium sheen gloss.

PACKAGING

160 Gallon Kit: Side-A (Isocyanate side): One 55 Gallon Drum, containing 53.4 gallons. Side-B (Resin side): Two 55 Gallon Drums, each containing 53.4 gallons.
The volume mixing ratio is 1A : 2B.
Contact Polycoat Products for product availability.

MIXING

Polyeuro® 1050H may not be diluted under any circumstances. Use appropriate cleaner for purge line and flushing of equipment and if spraying stops for periods exceeding the pot life of the material. Thoroughly mix Polyeuro® 1050H Side-B material with air driven power equipment until a homogeneous mixture and color is obtained. Opened material must be used within 1-2 days due to moisture sensitivity. Side-B must be thoroughly agitated for at least thirty (30) minutes prior to application. Total suspension must be achieved. Side-A requires no mixing.

TECHNICAL DATA (Based on compressed film)

Mix Ratio by Volume	1A : 2B
Solids Content	100%
Gel Time, 100 ± 10°F	40-80 secs
Tack Free Time @ 70°F (40mils)	max 5 minutes
Service Time @ 70°F	24-48 hours
Viscosity @ 100 ± 5°F, ASTM D445-79:	
Part-A	125 ± 50 cps
Part-B	500 ± 50 cps
Specific Gravity, ASTM D-4659:	
Part-A	1.2 max
Part-B	1.05 max
Flash Point	>200°F
Hardness, ASTM D-2240	65 ± 5 D
Dry Film Thickness per Coat	20-100 mils
VOC Content, ASTM D-2369-81	0 gm/l
Tensile, ASTM D-412	2800 ± 200 psi
Elongation, ASTM D-412	20-30%
Tear, Die "C" ASTM D-624	400 ± 50 pli
Coverage Rate	1604 ft²/mil/gal
Shelf Life @ 75°F in Sealed, Unopened Containers	1 Year
Sag Resistance	Excellent
Dry Time @ 70°F: to touch	20 minutes
Dry Time @ 70°F: for light foot traffic	1 hour
Dry Time @ 70°F: for heavy foot traffic	24 hours
Cured to Service	24 hours
Maximum Recoat Period	24 hours*
*after 24 hours, surface must be abraded before recoating	
Full Cure	120 hours
Minimum Substrate Temperature	
Above Dew Point on Application	5°F
Service Temperature Resistance	
Immersion	120°F
Dry	180°F
Humidity Tolerance on Application	< 85%
Material Temperature Requirement for Application	
Activator	95 to 105°F
Base	95 to 120°F
Allowable Ambient Air Temperature for Application	
Maximum	120°F
Minimum	25°F

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

New and Old Concrete:
Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:
ASTM D4258 - Standard practice for cleaning concrete
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ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 - Concrete surface preparation

Wood:
All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):
Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:
Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:
Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:
Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:
The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:
Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:
Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:
Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:
Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:
An adhesion test is recommended prior to starting the project.

APPLICATION
Apply over prepared or suitably primed carbon steel or concrete. Application temperature for Polyeuro® 1050H should be between 40-120°F with relative humidity of <85%. Do not apply product unless temperature is at least 5° above the dew point. Recoat schedule is 1-3 hours dependent upon environment. See Specification Guide for re-coating guidelines and additional information.

APPLICATION METHODS
Check area of application to ensure that it conforms to the substrate requirements. Recommended surface temperature must be at least 5°F above the dew point.
Use Graco “Hydra-Cat” 45:1 Airless equipment or equal designed for heated, plural-component, high pressure spray application. High pressure equipment should have the capacity to apply product to a maximum 2500 psi from the proportioner to meet job site conditions. Heat and maintain material temperature in a range of 95-110°F and utilize insulated material hoses and application equipment to ensure spray consistency, metering and degree of cure of properly mixed product. Band heaters should not be used to heat or maintain temperature.
The conditioned materials shall be supplied to the proportioning equipment at a flowable, pumpable viscosity, and in such volume delivery to assure full supply for each pump stroke.
Recirculation system and solvent purge equipment is necessary to keep material maintained and spray equipment clean during application stoppage and/or for periods when exceeding the product potlife.

EQUIPMENT CLEANUP
Equipment should be cleaned with an environmentally safe, urethane-grade solvent (alcohol free) as permitted under local regulations immediately after use.

STORAGE
Polyeuro® 1050H has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers at 75°F.
If stored for a long period of time, rotate Side-A drums regularly.
Part-A and Part-B drums are recommended to be stored above 60°F.
Avoid freezing temperatures.
Store drums on wooden pallets to avoid direct contact with the ground.

LIMITATIONS
Polyeuro 1050H is not recommended for prolonged exposure to concentrated acids.
Do not open until ready to use.
No liability is assumed by Polycoat Products for substrate defects and/or improper substrate preparation and application.

WARNING
This product contains Isocyanates and Curative Material.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

TUFFSHIELD™ 801

High Performance
Spray Elastomer Coating

DESCRIPTION

Tuffshield™ 801 is an unique high tensile and tear resistance, rapid curing, 100% solids, flexible, two component spray elastomer that can be applied to suitably prepared concrete and metal surfaces. Its extremely fast gel time makes it suitable for applications down to -20°F. It may be applied in single or multiple applications without appreciable sagging and is relatively insensitive to moisture and temperature allowing application in most temperatures

FEATURES

- ❖Superior Abrasion and Impact Resistance
- ❖Excellent Tensile and Tear Resistance
- ❖Superior Hydrocarbon Resistance
- ❖Zero VOC (100% Solids)
- ❖Excellent Thermal Stability
- ❖Meets USDA Criteria
- ❖Low Temperature Flexibility
- ❖Good Chemical Resistance

TYPICAL USES

- ❖Structural Steel
- ❖Refineries
- ❖Fertilizer Plants
- ❖Secondary Containment
- ❖Food Processing Plants
- ❖Walkways and Balconies
- ❖Industrial and Manufacturing Facilities
- ❖Power Plants
- ❖Cargo Containers
- ❖Landfill Containment
- ❖Parking Garage Decks
- ❖Cold Storage Facilities

COLORS

Clear/Neutral. Custom colors are available upon request. Color Packs, when used, must be added to Part-B.
Due to its aromatic composition, Tuffshield™ 801 will tend to yellow or darken in color and will become flat after exposure to UV light.

PACKAGING

10 gallon kit: 5 gallons Part-A (Isocyanate side) and 5 gallons Part-B (Resin side).

100 gallon kit: 50 gallons Part-A (Isocyanate side) and 50 gallons Part-B (Resin side).

COVERAGE

Tuffshield™ 801 may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

Carbon Steel:

A. Exterior coating: Abrasive Blast to SSSP, SP-10 (Near-white) with a surface profile of 1.2 - 2.2 mils.
B. Internal Lining: Abrasive Blast to SSSP-SP-5 (White metal)

TECHNICAL DATA

Abrasion Resistance ASTM-D4060		
1 kg wt 1000 cycles:		
CS-17 Wheel Weight Loss		7.1 mg
Tear	ASTM D-412	425 ± 50 pli
Elongation	ASTM D-412	375% ± 50%
Tensile	ASTM D-412	3800 ± 500 psi
Hardness	ASTM D-2240	50 ± 5 D
Pot Life	@ 160°F	2 - 4 secs
Tack Free Time	@ 75°F	20 - 40 secs
Recoat Time	@ 75°F	0 - 6 hours
Viscosity	@150-160°F (66.5-71°C),	Brookfield:
Part-A		200 ± 50 cps
Part-B		300 ± 50 cps
Density	Side A & B Combined	9.51 lbs/gal
Flash Point		> 200°F
Service Temperature		-40°F to 250°F
Water Vapor Permeability, ASTM E-96		0.468 perm-inch
VOC Content		0 gm/lit
Recommended Applied Thickness		> 2 mm
Return to Service:		
Foot Traffic		1 - 4 hours
Full Service		10 - 24 hours
Water Absorption, ASTM D471		
(maximum 23°C, 24 hours)		< 0.5 %
Crack Bridging, ASTM C836		
(-25°C, 1.6mm crack, 25 cycles)		Pass
Impact Resistance @ 25°C (ASTM G14)		> 200 lbs
Pull-Off Strength (minimum), ASTM D4541:		
Inter-Coat Adhesion		Excellent (within recoat time)
Concrete (Shot blasted profile), substrate failure occurred		> 500 psi
Concrete (Primed), substrate failure occurred		> 500 psi
Steel (90 um blast profile)		> 900 psi
Lineal Shrinkage		1 - 2%
Flexibility (1/8" (3mm) Mendrel Bend Test), ASTM D1737		Pass
Resistance to Weathering, ASTM G-23		
(Type QUV Weatherometer-2000 hrs exposure)		No cracking or blistering. Color change, gloss reduction & chalking are noted.

(*These physical properties from sample sprayed with Graco Foam Cat 200 @ 2000 psi minimum, with Gusmer GX7-400 mechanical purge gun @ 150-160°F. Different machine and parameter will change these properties. User should perform their own independent testing as properties are approximate.)

with a surface profile of 2.2 -3 .2 mils. Remove all dust, etc. on all surfaces intended for coating, prior to application.

New and Old Concrete:

Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:

ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete
ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 - Concrete surface preparation

Wood:

All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):

Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Tuffshield™ 801 on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:

Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:

Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:

Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:

The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:

Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:

Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:

Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:

Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:

An adhesion test is recommended prior to starting the project.

MIXING

Tuffshield™ 801 may not be diluted under any circumstances. Thoroughly mix Tuffshield™ 801 Part-B (Resin side) with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION

Both Part-A and Part-B material should be preconditioned at 75-85°F before application.

Recommended surface temperature must be at least 5°F above the dew point.

Tuffshield™ 801 should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor, Glass Craft or other equivalent machine may be used.

Both Part-A and Part-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 160-170°F. Adequate pressure and temperature should be maintained at all times.

Tuffshield™ 801 should be sprayed in smooth, multidirectional passes to improve uniform thickness and appearance.

STORAGE

Tuffshield™ 801 has a shelf life of one (1) year from date of manufacture, in factory-sealed containers.

Part-A and Part-B drums must be stored between 70°F - 95°F.

Avoid freezing temperatures.

Store drums on wooden pallets to avoid direct contact with the ground.

If stored for a long period of time, rotate Part-A and Part-B drums regularly.

LIMITATIONS

Do not open until ready to use.

Both Part-A and Part-B containers must be fitted with a desiccant device during use.

WARNING

This product contains Isocyanates and Curative Material.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

TUFFSHIELD™ II HAR

High Abrasion Resistance Spray Elastomer Coating

DESCRIPTION

Tuffshield™ II HAR (High Abrasion Resistance) is a revolutionary fast set, 100% solids, flexible two component spray elastomer that gives outstanding physical performance against abrasion tear and impact. It is designed to give exceptional values including tensile, high tear and impact resistance in severe demanding applications against abrasion and corrosion. It may be applied in single or multiple applications without appreciable sagging and is relatively insensitive to moisture and temperature allowing application in most temperatures. Its extremely fast gel time makes it suitable for applications down to -20°F.

FEATURES

- ❖Exceptional Abrasion Resistance
- ❖Exceptional Hydrolytic Stability
- ❖High Tear and Impact Resistance
- ❖Excellent Impact Dampening
- ❖Excellent Thermal Stability
- ❖Zero VOC (100% Solids)
- ❖Low Temperature Flexibility
- ❖Good Chemical Resistance
- ❖Coats Carbon or Mild Steel Metals without Primer

TYPICAL USES

With its durable characteristics, Tuffshield™ II HAR is intended to use as a protective lining and coating on interior of concrete, masonry and metal structures in various facilities like:

- ❖Dredging
- ❖Petrol Refineries
- ❖Cargo Containers
- ❖Mining Operations
- ❖Landfill Containment
- ❖Marine Environments
- ❖Secondary Containment
- ❖Water and Waste Water Treatment
- ❖Industrial and Manufacturing Facilities

COLORS

Clear/Neutral. Custom colors are available upon request. Color Packs, when used, must be added to Part-B.
Due to its aromatic composition, Tuffshield™ II HAR will tend to yellow or darken in color and will become flat after exposure to UV light.

PACKAGING

10 gallon kit: 5 gallons Part-A (Isocyanate side) and 5 gallons Part-B (Resin side).

100 gallon kit: 50 gallons Part-A (Isocyanate side) and 50 gallons Part-B (Resin side).

COVERAGE

Tuffshield™ II HAR may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one

TECHNICAL DATA

Abrasion Resistance		
ASTM-D4060, 1 kg wt 1000 cycles:		
H-18 Wheel Weight Loss		39 mg
CS17 Wheel Weight Loss		0.8 mg
Tear	ASTM D-624	350 ± 25 pli
Elongation	ASTM D-300	275% ± 50%
Tensile	ASTM D-412	3200 ± 300 psi
Hardness	ASTM D-2240	42 ± 3 D
Pot Life	@ 160°F	2 - 4 secs
Tack Free Time	@ 75°F	20 - 40 secs
Recoat Time	@ 75°F	< 1 hour
Viscosity	@150-160°F (66.5-71°C), Brookfield:	
Part-A		200 ± 50 cps
Part-B		200 ± 50 cps
Density	Side A & B Combined	9.28 lbs/gal
Flash Point		> 200°F
Service Temperature		-40°F to 250°F
Water Vapor Permeability, ASTM E-96		1.340 perm-inch
VOC Content		0 gm/lit
Recommended Applied Thickness		> 2 mm
Return to Service:		
Foot Traffic		2 - 4 hours
Full Service		10 - 24 hours
Water Absorption, ASTM D471 (maximum 23°C, 24 hours)		< 0.5 %
Crack Bridging, ASTM C836 (-25°C, 1.6mm crack, 25 cycles)		Pass
Impact Resistance @ 25°C (ASTM G14)		> 200 lbs
Pull-Off Strength (minimum), ASTM D4541:		
Inter-Coat Adhesion		Excellent (within recoat time)
Concrete (Shot blasted profile), substrate failure occurred		> 500 psi
Concrete (Primed), substrate failure occurred		> 500 psi
Steel (90 um blast profile)		> 900 psi
Lineal Shrinkage		1 - 2%
Flexibility (1/8" (3mm) Mendrel Bend Test), ASTM D1737		Pass
Resistance to Weathering, ASTM G-23 (Type QUV Weatherometer-2000 hrs exposure)		No cracking, blistering. Color change, gloss reduction & chalking are noted.

(*These physical properties from sample sprayed with Graco Foam Cat 200 @ 2000 psi minimum, with Gusmer GX7-400 mechanical purge gun @ 150-160°F. Different machine and parameter will change these properties. User should perform their own independent testing as properties are approximate.)

project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

Carbon Steel:

A. Exterior coating: Abrasive Blast to SSSP, SP-10 (Near-white) with a surface profile of 1.2 - 2.2 mils.

B. Internal Lining: Abrasive Blast to SSSP-SP-5 (White metal) with a surface profile of 2.2 -3 .2 mils. Vacuum all surfaces to remove dust, etc., prior to application.

New and Old Concrete:

Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:

ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete
ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 - Concrete surface preparation

Wood:

All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):

Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Tuffshield™ II HAR on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:

Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:

Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:

Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:

The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:

Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:

Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:

Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:

Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:

An adhesion test is recommended prior to starting the project.

MIXING

Tuffshield™ II HAR may not be diluted under any circumstances. Thoroughly mix Tuffshield™ 801 Part-B (Resin side) with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION

Both Part-A and Part-B material should be preconditioned at 75-85°F before application. Recommended surface temperature must be at least 5°F above the dew point.

Tuffshield™ II HAR should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor, Glass Craft or other equivalent machine may be used.

Both Part-A and Part-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 160-170°F. Adequate pressure and temperature should be maintained at all times.

Tuffshield™ II HAR should be sprayed in smooth, multidirectional passes to improve uniform thickness and appearance.

EQUIPMENT CLEAN UP

Equipment should be cleaned with an environmentally safe, urethane-grade solvent (alcohol free) as permitted under local regulations immediately after use.

STORAGE

Tuffshield™ II HAR has a shelf life of one (1) year from date of manufacture, in factory-sealed containers.

Part-A and Part-B drums are recommended to be stored above 60°F. Avoid freezing temperatures

Store drums on wooden pallets, avoid direct contact with the ground. If stored for a long period of time, rotate drums regularly.

LIMITATIONS

Do not open until ready to use.

Both Part-A and Part-B containers must be fitted with a desiccant device during use.

WARNING

This product contains Isocyanates and Curative Material.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® 8245

Two Component Aromatic Polyurethane Polyurea Protective Coating

DESCRIPTION

Polyeuro® 8245 is designed for acid and base environments and is a fast set, rapid curing, 100% solids, flexible, aromatic, two component spray polyurethane polyurea that can be applied to suitably prepared concrete and metal surfaces. Its extremely fast gel time makes it suitable for applications down to -20°F. It may be applied in single or multiple applications without appreciable sagging and is relatively insensitive to moisture and temperature allowing application in most temperatures.

FEATURES

- ❖Excellent Acid & Base Resistance
- ❖Excellent Thermal Stability
- ❖Meets USDA Criteria
- ❖Low Temperature Flexibility
- ❖Extremely Low Permeance Rate
- ❖Excellent Acid & Base Resistance
- ❖Coats Most Metals without Primer
- ❖Installed With or Without Reinforcement in Transitional Areas
- ❖Zero VOC
- ❖100% Solids
- ❖Odorless
- ❖Seamless

TECHNICAL DATA

Mix Ratio by Volume	1A : 1B
Pot Life @ 160°F	5-10 seconds
Tack Free Time	40-80seconds
Recoat Time	0-2 hours
Viscosity at 150-160°F (66.5-71°C), Brookfield:	
Part-A	200 ± 100 cps
Part-B	500 ± 20 cps
Density (Side A & B Combined)	8.75 lbs/gal
Flash Point	>200°F
Hardness, ASTM D-2240	45 ± 5 D
Tensile, ASTM D-412	1300 ± 200 psi
Elongation, ASTM D-412	40% ± 20%
Tear, ASTM D-624	230 ± 30 pli
Service Temperature	-40°F to 250°F

(*These physical properties from sample sprayed with Graco Foam Cat 200 @ 2000 psi minimum, with Gusmer GX7-400 mechanical purge gun @ 150-160°F. Different machine and parameter will change these properties. User should perform their own independent testing as properties are approximate.)

TYPICAL USES

- ❖Power Plants
- ❖Fertilizer Plants
- ❖Mining Operations
- ❖Food Processing Plants
- ❖Marine Environments
- ❖Secondary Containment
- ❖Water and Waste Water Treatment
- ❖Refineries
- ❖Structural Steel
- ❖Cold Storage Facilities
- ❖Paper and Pulp Mills

COLORS

Black and Grey. Custom colors are available upon request. Color Packs, when used, must be added to Part-B.
Due to its aromatic composition, Polyeuro® 8245 will tend to yellow or darken in color and will become flat after exposure to UV light.

PACKAGING

10 gallon kit: 5 gallons Part-A (Isocyanate side) and 5 gallons Part-B (Resin side).

100 gallon kit: 50 gallons Part-A (Isocyanate side) and 50 gallons Part-B (Resin side).

COVERAGE

Polyeuro® 8245 may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

SURFACE PREPARATION

In general, coating performance and adhesion are directly proportional to surface preparation. Most failures in the performance of surface coatings can be attributed to poor surface preparation. Polyurea coatings rely on the structural strength of the substrate to which they are applied. All surfaces must be free of dust, dirt, oil, grease, rust, corrosion and other contaminants. When coating substrates previously used, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycoat recognizes the potential for unique substrates from one project to another. The following information is for general reference, and for project-specific questions, contact Polycoat.

New and Old Concrete:

Refer to SSPC-SP13/NACE 6, or ICRI 03732: CSP 3-5. New concrete must be cured for 28 days prior to product application. Surface must be clean, dry, sound and offer sufficient profile for product adhesion. Remove all dust, dirt, oil, form release agents, curing compounds, salts, efflorescence, laitance and other foreign matter by shotblasting and/or suitable chemical means, in accordance with local chemical regulations. Rinse thoroughly, to achieve a pH between 8.0 and 11.0. Allow to dry completely. If old concrete has a surface that has deteriorated to an unacceptably rough surface, Polycoat Products PC-260 or a mixture of Polyprime 21 and sand should be used as a repair agent for cracks, spalls, bug holes and voids. Upon full cure of the repair agent, prime the entire surface intended for coating.

Concrete Surface Preparation Reference:

ASTM D4258 - Standard practice for cleaning concrete
ASTM D4259 - Standard practice for abrading concrete
ASTM D4260 - Standard practice for etching concrete
ASTM F1869 - Standard test method for measuring moisture vapor emission rate of concrete
ICRI 03732 - Concrete surface preparation

Wood:
All wood should be clean, dry and free of any knots, splinters, oil, grease or other contaminants. Splintered or rough areas should be sanded. Knots should be repaired using Polycoat Products PC-260 with sand. Upon full cure of the repair agent, prime the entire surface intended for coating.

Steel (Atmospheric and Immersion Exposure):
Remove all oil, grease, weld spatters and round off any sharp edges from surface. Minimum surface preparation is Near White Metal Blast Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 2-3 mils. Prime and shoot Polyeuro® on to any bare metal the same day as it is cleaned to minimize any potential flash rusting.

Aluminum:
Aluminum should be blasted with aluminum oxide or sand, and not with steel or metal grit. Excessive blasting may result in a warped or deformed surface. After blasting, wash aluminum with a commercially available aluminum cleaner. Allow to dry, then prime.

Brass and Copper:
Brass and copper should be blasted with sand, and not with steel or metal grit. Remove all dust and grease prior to applying primer.

Galvanized Surfaces:
Clean and degrease any contaminated surfaces before priming. Do not blast galvanized surfaces with an abrasive grit. An adhesion test is recommended prior to starting the project.

Fiberglass Reinforced Plastic:
The gel coat should be lightly blasted or sanded with 80 grit sandpaper and cleaned.

Plastic Foams:
Enhanced adhesion is obtained when the foam is mechanically abraded. When coating polystyrene, do not use a solvent-based primer.

Textiles, Canvas, Fabrics:
Adhesion to most fabrics, geothermal membranes and textiles does not require a primer.

Stainless Steel:
Stainless steel may be grit blasted and degreased before priming. Some stainless steel alloys are so inert that it is not possible to achieve a satisfactory bond. An adhesion test is recommended prior to starting the project.

New and Old Cast Iron:
Blast with a steel grit and degrease before priming. Old cast iron is difficult to prepare for a satisfactory bond. It can absorb oil and water soluble contaminants that will keep returning to the surface after the coating system has been applied and affect the coating system adhesion. An adhesion test is recommended prior to starting the project.

All Other Surfaces:
An adhesion test is recommended prior to starting the project.

MIXING
Polyeuro® 8245 may not be diluted under any circumstances. Thoroughly mix Polyeuro® 5502 Part-B (Resin side) with air driven power equipment until a homogeneous mixture and color is obtained.

APPLICATION
Both Part-A and Part-B material should be preconditioned at 80-90°F before application.
Polyeuro® 8245 should be applied using a plural component, heated, high pressure 1:1 spray mixing equipment like Graco's Reactor, Glass Craft or other equivalent machine may be used.
Both Part-A and Part-B materials should be sprayed at a minimum of 2000 psi and at temperatures above 150°F. Adequate pressure and temperature should be maintained at all times.
Polyeuro® 8245 should be sprayed in smooth, multidirectional passes to improve uniform thickness and appearance.

STORAGE
Polyeuro® 8245 has a shelf life of six (6) months from date of manufacture, in factory-sealed containers.
Part-A and Part-B drums are recommended to be stored above 60°F.
Avoid freezing temperatures.
Store drums on wooden pallets to avoid direct contact with the ground.
If stored for a long period of time, rotate Part-A and Part-B drums regularly.

LIMITATIONS
Do not open until ready to use.
Both Part-A and Part-B containers must be fitted with a desiccant device during use.

WARNING
This product contains Isocyanates and Curative Material.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYCOAT-STAINGARD 6000

Aliphatic Polyaspartic Polyurea Topcoat Technical Data Sheet

DESCRIPTION

Polycoat-Staingard 6000 is a 100% solids by volume, aliphatic polyaspartic coating, two-component, liquid applied, environmentally friendly surface topcoat for waterproofing membrane systems, with a citrus odor. Polycoat-Staingard 6000 is quick curing and specifically formulated to be installed in thin film applications.

FEATURES

- ❖Quick Cure
- ❖Color Stable
- ❖High Tensile Strength
- ❖High Gloss
- ❖Abrasion Resistant
- ❖Topcoat over aromatic polyurea, polyurethane and epoxy applications raging from 35°F to 130°F, service temperature 0°F to 200°F
- ❖Very Durable
- ❖Excellent Weatherability
- ❖Seamless Waterproofing Membrane
- ❖UV Resistant For Superior Gloss Retention
- ❖Meets California AQMD Requirements

TYPICAL USES

- ❖Concrete
- ❖Steel
- ❖Plywood
- ❖Plastic
- ❖Cold Storage Areas
- ❖Food Processing Areas
- ❖Industrial Warehouses
- ❖Pulp and Paper Mills
- ❖Chemical Plants
- ❖Fertilizer Plants
- ❖Off-Shore Oil Platforms
- ❖Pipeline Barges

COLOR

Clear, Grey and Tan

Custom colors are also available. Minimum order of 100 gallons (378.5 liters). See color chart for special provisions. Contact Polycoat Products for more information.

PACKAGING

2 gallon kit: 1 gallon can part-A and 1 gallon can Part-B.

10 gallon kit is not an in stock item and is available with advanced notice. Contact Polycoat Products for availability.

ODOR

Citrus

TECHNICAL DATA, POLYCOAT-STAINGARD 6000, CLEAR

Mix Ratio by Volume	1A : 1B
Coverage Rate	See Guide Specification
Dry Film Thickness, exclusive of aggregate, two coats @ ½ gal/100 sq. ft. each	16 mils 406 microns
Pot Life at 75°F (24°C), 50% RH	20-30 minutes
Hardness, ASTM D-2240	65 ± 2 Shore D
Tear Resistance, Die C, ASTM D-624	400 ± 50 pli 70 ± 10 kN/m
Tensile Strength, ASTM D-412	3000± 200psi 20.7 ± 2 MPa
Ultimate Elongation, ASTM D-412	70 ± 10%
Specific Gravity,	
Side-A	1.1
Side-B	1.05
Total Solids by Weight, ASTM D-2369	100%
Total Solids by Volume, ASTM D-2697	100%
Viscosity at 75°F (24°C),	
Side-A	2600 ± 300cps
Side-B	1100 ± 300cps
Volatile Organic Compounds, ASTM D-2369-81	0 lb/gal 0 gm/liter

TECHNICAL DATA, POLYCOAT-STAINGARD 6000, PIGMENTED

Mix Ratio by Volume	1A : 1B
Coverage Rate	See Guide Specification
Dry Film Thickness, exclusive of aggregate, two coats @ ½ gal/100 sq. ft. each	16 mils 406 micron
Pot Life at 75°F (24°C), 50% RH	20-30 minutes
Hardness, ASTM D-2240	65 ± 2 Shore D
Tear Resistance, Die C, ASTM D-624	375 ± 50 pli 65.6 ± 10 kN/m
Tensile Strength, ASTM D-412	2600± 200psi 17.9 ± 2 MPa
Ultimate Elongation, ASTM D-412	30 ± 10%
Specific Gravity,	
Side-A	1.1
Side-B	1.24
Total Solids by Weight, ASTM D-2369	100%
Total Solids by Volume, ASTM D-2697	100%
Viscosity at 75°F (24°C),	
Side-A	2600 ± 300cps
Side-B	2000 ± 300cps
Volatile Organic Compounds, ASTM D-2369-81	0 lb/gal 0 gm/liter

MIXING

Polycoat-Staingard 6000 may not be diluted under any circumstance. Proportions are premeasured. Polycoat-Staingard 6000 Part-A and Part-B should be mixed individually before combining. Add Part-B to Part-A while mixing, using a mechanical mixer at medium speed. Mix until a homogeneous mixture and color is obtained (at least 5 minutes) and mix frequently during application to maintain uniform color. Use care to scrape the sides of the container to ensure that no unmixed material remains. Use caution not to whip air into the material as this may result in pinhole blisters and/or shortened pot life.

Do not mix any material that cannot be used within 20-30 minutes.

APPLICATION

Apply Polycoat-Staingard 6000 evenly over the entire deck. For best results, use an airless sprayer. A squeegee or phenolic resin core roller may be used, but extra care should be taken not to cause air bubbles.

Polycoat-Staingard 6000 should be applied at a minimum film thickness of 5 mils. It should be noted that the heavier the application, the longer the curing process takes.

CURING
At 70°F (21°C) and 50% relative humidity, allow each coat to cure 1-3 hours.

Allow 6 hours before permitting light pedestrian traffic and at least 24-48 hours before permitting heavy pedestrian traffic on to the finished surface.

Uncured Polycoat-Staingard 6000 is very sensitive to heat and moisture. Higher temperatures and/or high humidity will accelerate the cure time. Use caution in batch sizes and thickness of application.

Low temperature and/or low humidity extend the cure time.

EQUIPMENT CLEANUP
Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

STORAGE
Polycoat-Staingard 6000 has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers.

LIMITATIONS
Surfaces must be dry, clean and free of foreign matter.

Clear coating may turn opaque and cloudy due to moisture penetration, especially in exterior applications.

Surface may be slippery when wet.

Containers that have been opened must be used as soon as possible.

Do not dilute under any circumstance.

WARNING
This product contains Isocyanates.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYCOAT-STAINGARD 6072 / 6072SC

Aliphatic Polyaspartic Polyurea Topcoat Technical Data Sheet

DESCRIPTION

Polycoat-Staingard 6072 is a 72% solids by volume, aliphatic polyaspartic coating, two-component, liquid applied, environmentally friendly surface topcoat for waterproofing membrane systems, with a citrus odor. Polycoat-Staingard 6072 is quick curing and specifically formulated to be installed in thin film applications. Polycoat-Staingard 6072SC is designed for use in Southern California to be in compliance with air quality standards.

FEATURES

- ❖Quick Cure
- ❖Color Stable
- ❖High Tensile Strength
- ❖High Gloss
- ❖Abrasion Resistant
- ❖Very Durable
- ❖Topcoat over aromatic polyurea, polyurethane and epoxy applications raging from 35°F to 130°F, service temperature 0°F to 200°F
- ❖Excellent Weatherability
- ❖Seamless Waterproofing Membrane
- ❖UV Resistant For Superior Gloss Retention
- ❖For use in SCAQMD areas, use only Polycoat-Staingard 6072SC
- ❖For use in California, excluding SCAQMD areas, use only Polycoat-Staingard 6072

TYPICAL USES

- ❖Concrete
- ❖Steel
- ❖Plywood
- ❖Plastic
- ❖Cold Storage Areas
- ❖Food Processing Areas
- ❖Industrial Warehouses
- ❖Pulp and Paper Mills
- ❖Chemical Plants
- ❖Fertilizer Plants
- ❖Off-Shore Oil Platforms
- ❖Pipeline Barges

COLOR

Clear, Grey and Tan. Custom colors are also available.

Minimum order of 100 gallons (379 liters). See color chart for special provisions. Contact Polycoat Products for more information.

PACKAGING

2 gallon kit: 1 gallon can part-A and 1 gallon can Part-B.

10 gallon kit is not an in-stock item and is available with advanced notice. Contact Polycoat Products for availability.

MIXING

Polycoat-Staingard 6072 may not be diluted under any circumstance. Polycoat-Staingard 6072 Part-A and Part-B should be mixed individually before combining. Add Part-B to Part-A while mixing, using a mechanical mixer at medium speed. Mix until a homogeneous mixture and color is obtained (at least 5 minutes) and mix frequently during application to maintain uniform color. Use care to scrape the sides of the container to ensure that no unmixed material remains. Use caution not to whip air into the material as this may result in pinhole blisters and/or shortened pot life.

Do not mix any material that cannot be used within 45 minutes.

TECHNICAL DATA, POLYCOAT-STAINGARD 6072, CLEAR (250 VOC)
(For Use In California Excluding SCAQMD Areas)

Mix Ratio by Volume	1A : 1B
Coverage Rate	See Guide Specification
Dry Film Thickness, exclusive of aggregate @ 1 gal/100 sq. ft.	11 ± 2 mils 279 ± 50microns
Pot Life at 75°F (24°C), 50% RH	45-60 minutes
Hardness, ASTM D-2240	50 ± 5 Shore D
Tear Resistance, Die C, ASTM D-624	300 ± 50 pli 52.5 ± 9 kN/m
Tensile Strength, ASTM D-412	2500 ± 200 psi 17.2 ± 2 MPa
Ultimate Elongation, ASTM D-412	100 ± 25 %
Specific Gravity,	
Side-A	1.05
Side-B	1.01
Total Solids by Weight, ASTM D-2369	77 ± 2%
Total Solids by Volume, ASTM D-2697	72 ± 2%
Viscosity at 75°F (24°C),	
Side-A	200 ± 50 cps
Side-B	200 ± 50 cps
Volatile Organic Compounds, ASTM D-2369-81	1.97 lb/gal 236 gm/liter

TECHNICAL DATA, POLYCOAT-STAINGARD 6072SC, CLEAR
(100 VOC) (For Use In SCAQMD Areas)

Mix Ratio by Volume	1A : 1B
Coverage Rate	See Guide Specification
Dry Film Thickness, exclusive of aggregate @ 1 gal/100 sq. ft.	11 ± 2 mils 279 ± 50microns
Pot Life at 75°F (24°C), 50% RH	45-60 minutes
Hardness, ASTM D-2240	50 ± 5 Shore D
Tear Resistance, Die C, ASTM D-624	300 ± 50 pli 52.5 ± 9 kN/m
Tensile Strength, ASTM D-412	2500 ± 200 psi 17.2 ± 2 MPa
Ultimate Elongation, ASTM D-412	100 ± 25 %
Specific Gravity,	
Side-A	1.12
Side-B	1.08
Total Solids by Weight, ASTM D-2369	77 ± 2%
Total Solids by Volume, ASTM D-2697	78 ± 2%
Viscosity at 75°F (24°C),	
Side-A	200 ± 50 cps
Side-B	200 ± 50 cps
Volatile Organic Compounds, ASTM D-2369-81	0.83 lb/gal 100 gm/liter

APPLICATION

Apply Polycoat-Staingard 6072 evenly over the entire deck. For best results, use an airless sprayer. A squeegee or

phenolic resin core roller may be used, but extra care should be taken not to cause air bubbles.

Polycoat-Staingard 6072 should be applied at a minimum film thickness of 5 mils. It should be noted that the heavier the application, the longer the curing process takes.

CURING

At 70°F (21°C) and 50% relative humidity, allow each coat to cure 2-4 hours.

Allow 6 hours before permitting light pedestrian traffic and at least 24-48 hours before permitting heavy pedestrian traffic on to the finished surface.

Uncured Polycoat-Staingard 6072 is very sensitive to heat and moisture. Higher temperatures and/or high humidity will accelerate the cure time. Use caution in batch sizes and thickness of application.

Low temperature and/or low humidity extend the cure time.

EQUIPMENT CLEANUP

Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

STORAGE

Polycoat-Staingard 6072 has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers.

LIMITATIONS

Surfaces must be dry, clean and free of foreign matter.

Clear coating may turn opaque and cloudy due to moisture penetration, especially in exterior applications.

Surface may be slippery when wet.

Containers that have been opened must be used as soon as possible.

Do not dilute under any circumstance.

WARNING

This product contains Isocyanates and Solvent.

TECHNICAL DATA, POLYCOAT-STAINGARD 6072, PIGMENTED (250 VOC) (For Use In California Excluding SCAQMD Areas)

Mix Ratio by Volume	1A : 1B
Coverage Rate	See Guide Specification
Dry Film Thickness, exclusive of aggregate, Per coat @ 1 gal/100 sq. ft.	11 ± 2 mils 279 ± 50microns
Pot Life at 75°F (24°C), 50% RH	45-60 minutes
Hardness, ASTM D-2240	50 ± 5 Shore D
Tear Resistance, Die C, ASTM D-624	225 ± 35 pli 39.4 ± 6 kN/m
Tensile Strength, ASTM D-412	2300 ± 300 psi 15.8 ± 2 MPa
Ultimate Elongation, ASTM D-412	100 ± 25 %
Specific Gravity,	
Side-A	1.04
Side-B	1.25
Total Solids by Weight, ASTM D-2369	79 ± 2%
Total Solids by Volume, ASTM D-2697	72 ± 2%
Viscosity at 75°F (24°C),	
Side-A	200 ± 50 cps
Side-B	300 ± 50 cps
Volatile Organic Compounds, ASTM D-2369-81	1.97 lb/gal 236 gm/liter

TECHNICAL DATA, POLYCOAT-STAINGARD 6072SC, PIGMENTED (100 VOC) (For Use In SCAQMD Areas)

Mix Ratio by Volume	1A : 1B
Coverage Rate	See Guide Specification
Dry Film Thickness, exclusive of aggregate, Per coat @ 1 gal/100 sq. ft.	11 ± 2 mils 279 ± 50microns
Pot Life at 75°F (24°C), 50% RH	45-60 minutes
Hardness, ASTM D-2240	50 ± 5 Shore D
Tear Resistance, Die C, ASTM D-624	225 ± 35 pli 39.4 ± 6 kN/m
Tensile Strength, ASTM D-412	2300 ± 300 psi 15.8 ± 2 MPa
Ultimate Elongation, ASTM D-412	100 ± 25 %
Specific Gravity,	
Side-A	1.10
Side-B	1.32
Total Solids by Weight, ASTM D-2369	81 ± 2%
Total Solids by Volume, ASTM D-2697	80 ± 2%
Viscosity at 75°F (24°C),	
Side-A	200 ± 50 cps
Side-B	300 ± 50 cps
Volatile Organic Compounds, ASTM D-2369-81	0.79 lb/gal 95 gm/liter

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLY-CAULK® 50A

Self-Leveling Polyurea Polyurethane Caulking Compound

DESCRIPTION

Poly-Caulk® 50A is a two component aromatic, 1:1 ratio, rapid setting, self leveling, polyurea polyurethane caulking compound for interior application.

FEATURES

- ❖100% Solids Meets VOC Regulations
- ❖Down Time 30-90 minutes
- ❖Meets USDA Criteria
- ❖Flexible
- ❖Odorless
- ❖Non-Toxic
- ❖Remains Flexible, Even In Cold Temperatures
- ❖Meets California VOC and AQMD Requirements

USES

Poly-Caulk® 50A is used on interior concrete surfaces, to repair random cracks, control joints, and other areas where down time is limited.

- ❖Food Processing Plants
- ❖Bridge Headers
- ❖Freezers and Cold Storage
- ❖Water Treatment Plants
- ❖Parking Garage Decks
- ❖Airports
- ❖Grade Matching
- ❖Saw/Utility Cuts

Note: Poly-Caulk® 50A will discolor in exterior applications.

COLOR

Concrete Grey

PACKAGING

10 gallon kit: One 5 gallon pail of Side-A and one 5 gallon pail of Side-B.

100 gallon kit: One 55 gallon drum (net 50 gallons) of Side-A and 55 gallon drum (net 50 gallons) of Side-B.

COVERAGE RATES LF/Gallon

Width of Joint

Depth of Joint	¼"	⅜"	½"	⅝"	¾"	⅞"	1"
¼"	308	205	154	123	102	88	77
⅜"	205	136	102	82	68	58	51
½"	154	102	77	61	51	44	38
⅝"	123	82	61	49	41	35	30
¾"	102	68	51	41	34	29	25
⅞"	88	58	44	36	29	25	22
1"	77	51	38	30	25	22	19

Coverages and yields shown do not include allowances for loss or waste and variations in job conditions. Each user must establish his own factors for loss from experience. These figures are without the use of Backer Rod.

TECHNICAL DATA

Mix Ratio by Volume	1A : 1B
Specific Garvity	
Part-A	1.08
Part-B	1.08
Viscosity at 80°F	
Part-A	1600 cps
Part-B	1200 cps
Gel Time @ 75°F, ASTM D-2471	50 seconds
Shore A hardness, ASTM D-2240	50 ± 5A
Tensile Strength, ASTM D-412	425 ± 50 psi
Elongation, ASTM D-412	550 ± 50%
Tear Strength, ASTM D-624	50 ± 10 pli
Volatile Organic Compounds, (Part-A & B combined)	
ASTM D-2369-81	<0.35 lbs/gal 40 gm/liter

SURFACE PREPARATION

Allow concrete to cure 28 days before installation.

Saw cut the joint to ACI Recommendations.

All joints must be clean and dry prior to installing Poly-Caulk® 50A.

If joint is damp, dry with heat torch.

If primer is required, use Polyprime 2180 or Polyprime EBF.

Remove all dust from the concrete pores prior to installing Poly-Caulk® 50A.

If backer rod is used in control joints, the recommended depth is not greater than 25% of the total depth of the slab.

Consturction joints are to be filled to full depth using no backer rod or silica sand.

To repair T-joints, the joint should be cut a minimum of 25% of the total depth of the slab. The side of the T-joint must be cut 1½" from the joint and a minimum of ½" deep.

For random crack each side of the crack should be cut to create a minimum ½" deep vertical edge.

Ensure that all joint edges are at 90° angles to grade with no V-grooving or feather edges.

MIXING

Poly-Caulk® 50A may not be diluted under any circumstance.

Pre-mix Poly-Caulk® 50A Side-B material before combining with Side-A. Side-A material requires no mixing.

Add Side-A to Side-B while mixing, using a mechanical mixer at low speed. Mix until a homogeneous mixture and color is obtained (at least 5 minutes).

Use care to scrape the sides of the container to ensure that no unmixed material remains.

Use caution not to whip too much air into the material as this may result in pinhole blisters or shortened potlife.

APPLICATION

For best results, Apply Poly-Caulk® 50A with a 1:1 ratio machine pump, with or without heater as required.

This material can be applied at temperatures from 32°F (0°C) to as high as 135°F (57°C).

The product needs to be conditioned at 75-80°F prior to use.

FINISHING

After applying Poly-Caulk® 50A wait 60-90 minutes, depending on temperature and humidity before opening to traffic.

Slice off any overpour flush to grade.

Open to traffic once Poly-Caulk® 50A has set.

Surface can be utilized to light traffic within 90 minutes of application.

CLEAN UP

Cured product may be disposed of without restriction. Mix excess A and B material and allow to cure. Check local, state and federal laws before disposing of material.

STORAGE

Poly-Caulk® 50A should be stored at 60-90°F (15-35°C).

Poly-Caulk® 50A has a shelf life of one (1) year from date of manufacture in original, factory sealed containers.

LIMITATIONS

Do not use in cracks, construction joints or control joints if surface is subject to thermal cycling.

Discoloration will occur if exposed to UV, however no change will occur in the physical properties.

WARNING

This product contains Isocyanates and Curatives.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLY-CAULK® 80

100% Solids Self-Leveling Polyurea Caulking Compound

DESCRIPTION

Poly-Caulk® 80 is a two component aromatic, 1:1 ratio, rapid setting, self leveling, 100% solids polyurea caulking compound for interior and exterior horizontal application.

FEATURES

- ❖100% Solids Meets VOC Regulations
- ❖Down Time 30-90 minutes
- ❖Meets USDA Criteria
- ❖Flexible
- ❖Odorless
- ❖Non-Toxic
- ❖Remains Flexible, Even In Cold Temperatures
- ❖Meets California VOC and AQMD Requirements

USES

Poly-Caulk® 80 is used on interior and exterior horizontal concrete surfaces, to repair random cracks, control joints, and other areas where down time is limited.

- ❖Food Processing Plants
- ❖Bridge Headers
- ❖Freezers and Cold Storage
- ❖Waste Water Treatment Plants
- ❖Parking Garage Decks
- ❖Industrial/Manufacturing Facilities
- ❖Airports
- ❖Spalls
- ❖Truck Aprons
- ❖Grade Matching
- ❖Saw/Utility Cuts

Note: Poly-Caulk® 80 will discolor in exterior applications.

COLOR

Concrete Grey

PACKAGING

10 gallon kit: One 5 gallon pail of Side-A and one 5 gallon pail of Side-B.

100 gallon kit: One 55 gallon drum (net 50 gallons) of Side-A and 55 gallon drum (net 50 gallons) of Side-B.

COVERAGE RATES LF/Gallon

		Width of Joint						
		¼"	⅜"	½"	⅝"	¾"	⅞"	1"
Depth of Joint	¼"	308	205	154	123	102	88	77
	⅜"	205	136	102	82	68	58	51
	½"	154	102	77	61	51	44	38
	⅝"	123	82	61	49	41	35	30
	¾"	102	68	51	41	34	29	25
	⅞"	88	58	44	36	29	25	22
	1"	77	51	38	30	25	22	19

Coverages and yields shown do not include allowances for loss or waste and variations in job conditions. Each user must establish his own factors for loss from experience. These figures are without the use of Backer Rod.

TECHNICAL DATA

Mix Ratio by Volume	1A : 1B
Specific Garvity	
Part-A	1.16
Part-B	1.01
Viscosity at 80°F	
Part-A	430 cps
Part-B	550 cps
Gel Time @ 75°F, ASTM D-2471	50 seconds
Shore A hardness, ASTM D-2240	80 ± 2A
Tensile Strength, ASTM D-412	1500 ± 200 psi
Elongation, ASTM D-412	300 ± 50%
Tear Strength, ASTM D-624	275 ± 50 pli
Volatile Organic Compounds, (Part-A & B combined)	
ASTM D-2369-81	<0.75 lbs/gal 90 gm/liter

SURFACE PREPARATION

Allow concrete to cure 28 days before installation.

Saw cut the joint to ACI Recommendations.

All joints must be clean and dry prior to installing Poly-Caulk® 80.

If joint is damp, dry with heat torch.

If primer is required, use Polyprime 2180 or Polyprime EBF.

Remove all dust from the concrete pores prior to installing Poly-Caulk® 80.

If backer rod is used in control joints, the recommended depth is not greater than 25% of the total depth of the slab.

Construction joints are to be filled to full depth using no backer rod or silica sand.

To repair T-joints, the joint should be cut a minimum of 25% of the total depth of the slab. The side of the T-joint must be cut 1½" from the joint and a minimum of ½" deep.

For random crack and spall repairs each side of the crack should be cut to create a minimum ½" deep vertical edge.

Ensure that all joint edges are at 90° angles to grade with no V-grooving or feather edges.

MIXING

Poly-Caulk® 80A may not be diluted under any circumstance.

Pre-mix Poly-Caulk® 80A Side-B material before combining with Side-A. Side-A material requires no mixing.

Add Side-A to Side-B while mixing, using a mechanical mixer at low speed. Mix until a homogeneous mixture and color is obtained (at least 5 minutes).

Use care to scrape the sides of the container to ensure that no unmixed material remains.

Use caution not to whip too much air into the material as this may result in pinhole blisters or shortened potlife.

APPLICATION

For best results, Apply Poly-Caulk® 80 with a 1:1 ratio machine pump, with or without heater as required.

This material can be applied at environmental temperatures from 20°F (-6.6°C) to as high as 135°F (57°C).

The product needs to be conditioned at 75-80°F prior to use.

FINISHING

After applying Poly-Caulk® 80 wait 60-90 minutes, depending on temperature and humidity before opening to traffic.

Slice off any overpour flush to grade.

Open to traffic once Poly-Caulk® 80 has set.

Surface can be utilized to light traffic within 90 minutes of application.

CLEAN UP

Cured product may be disposed of without restriction. Mix excess A and B material and allow to cure. Check local, state and federal laws before disposing of material.

STORAGE

Poly-Caulk® 80 should be stored at 60-90°F (15-35°C).

Poly-Caulk® 80 has a shelf life of one (1) year from date of manufacture in original, factory sealed containers.

LIMITATIONS

Do not use in cracks, construction joints or control joints if surface is subject to thermal cycling.

Discoloration will occur if exposed to UV, however no change will occur in the physical properties.

WARNING

This product contains Isocyanates and Curatives.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLY-CAULK® HM

100% Solids Self-Leveling Polyurea Caulking Compound Technical Data Sheet

DESCRIPTION

Poly-Caulk® Hand-Mix is a two component, modified aliphatic, rapid setting, self-leveling, 100% solids polyurea caulking compound.

FEATURES

- ❖100% Solids
- ❖Flexible
- ❖Meets USDA Criteria
- ❖Odorless
- ❖Remains Flexible, Even In Cold Temperatures
- ❖Meets California VOC and AQMD Requirements

USES

Poly-Caulk® HM is for small repairs on interior and exterior horizontal concrete surfaces, to repair random cracks, control joints, and other areas where down time is limited.

- ❖Food Processing Plants
- ❖Airports
- ❖Bridge Headers
- ❖Spalls
- ❖Freezers and Cold Storage
- ❖Truck Aprons
- ❖Waste Water Treatment Plants
- ❖Grade Matching
- ❖Parking Garage Decks
- ❖Saw/Utility Cuts
- ❖Industrial/Manufacturing Facilities

COLORS

Grey

PACKAGING

1 gallon kit: One 1 gallon can (net fill 0.875 gallons) of Side-A and One 1 pint can (net fill 0.125 gallons) of Side-B.

SURFACE PREPARATION

Allow concrete to cure 28 days before installation.

Saw cut the joint to ACI Recommendations.

All joints must be clean and dry prior to installing Poly-Caulk® HM.

If joint is damp, dry with heat torch.

Remove all dust from the concrete pores prior to installing Poly-Caulk® HM.

Ensure that all joint edges are at 90° angles to grade with no V-grooving or feather edges.

MIXING

Poly-Caulk® HM may not be diluted under any circumstance.

Pre-mix Poly-Caulk® HM Side-B material before combining with Side-A. Side-A material requires no mixing.

Add Side-A to Side-B while mixing, using a mechanical mixer at slow speed. Mix until a homogeneous mixture and color is obtained (at least 5 minutes).

Use care to scrape the sides of the container to ensure that no unmixed material remains.

TECHNICAL DATA (Based on draw down film)	
Mix Ratio by Volume	7A : 1B
Hardness, ASTM D-2240	80 ± 4 Shore A
Elongation, ASTM D-412	600 ± 50%
Tensile Strength, ASTM D-412	2000 ± 200 psi 13.8 ± 1.4 MPa
Gel Time at 75°F (24°C), ASTM D-2471	4-5 minutes
Tear Strength, ASTM D-624	425 ± 50 pli 74.5 ± 8.8 kNm
Total Solids by Weight, ASTM D-2369	100%
Total Solids by Volume, ASTM D-2697	100%

Use caution not to whip air into the material as this may result in pinhole blisters and/or shortened pot life.

APPLICATION

NOTE: Poly-Caulk® HM may not be diluted under any circumstances. Proportions are premeasured.

Poly-Caulk® HM can be applied at ambient temperatures from 32°F (0°C) to as high as 135°F (57°C).

The product needs to be conditioned at 75-80°F prior to use.

FINISHING

After applying Poly-Caulk® HM, wait 4-5 hours, depending on temperature and humidity before opening to traffic.

Slice off any overpour flush to grade.

CLEAN UP

Cured product may be disposed of without restriction. Mix excess A and B material and allow to cure. Check local, state and federal laws before disposing of material.

STORAGE

Poly-Caulk® HM should be stored at room temperature, 60-95°F (15-35°C).

Poly-Caulk® HM has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C).

LIMITATIONS

Do not dilute Poly-Caulk® HM under any circumstances.

Do not use in cracks, construction joints or control joints if surface is subject to thermal cycling.

Discoloration will occur if exposed to UV, however no change will occur in the physical properties.

WARNING

This product contains Isocyanates and Curatives.

Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local Polycoat Products representative or visit our website for current technical data and instructions.

LIMITED WARRANTY

Polycoat Products warrants its products to be free of manufacturing defects and that they will meet Polycoat Products current published physical properties. Polycoat Products warrants that its products, when properly installed by a state licensed waterproofing contractor according to Polycoat Products guide specifications and product data sheets over a sound, properly prepared substrate, will not allow water migration for a period of one (1) year. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. There are no other warranties by Polycoat Products of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Polycoat Products shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. Polycoat Products shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. Polycoat Products reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

DISCLAIMER

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the users responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Polycoat Products makes no claim that these tests or any other tests, accurately represent all environments.

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POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYPRIME 21

High Solids
Epoxy-Polyamine Primer
Technical Data Sheet

DESCRIPTION

Polyprime 21 is a two component, high solids, liquid applied, epoxy-polyamine primer with unique penetrating characteristics.

FEATURES

- ❖Low Odor
- ❖Solvent Free
- ❖Excellent Adhesion
- ❖100% Solids
- ❖Low Viscosity

TYPICAL USES

- ❖Concrete
- ❖Plywood
- ❖Polyurethane Elastomeric Surfaces

COLORS

Part-A: Blue, Part-B: Yellow

PACKAGING

3 gallon kit: One 3.5 gallon pail, net fill 2 gallons (7.57 liters) of Part-A Blue Liquid and One 1 gallon (3.79 liter) can of Part-B Yellow Liquid

15 gallon kit: Two 5 gallon (18.9 liter) pails of Part-A Blue Liquid, and One 5 gallon (18.9 liter) pail of Part-B Yellow Liquid.

MIXING

The volume mixing ratio is 2 parts Part-A Blue Liquid to 1 part Part-B Yellow Liquid. Do not estimate.

Polyprime 21 Part-A and Part-B should be thoroughly mixed individually prior to combining to ensure a homogeneous material. The combined components should be thoroughly mixed using a mechanical mixer at slow speed.

APPLICATION

Polyprime 21 should be applied at the rate of 1 gallon (mixture of Part-A & Part-B)/300 sq. ft. (0.14 liters/m²). It can be applied using an airless sprayer, brush, or phenolic resin core roller.

Allow Polyprime 21 to become tack free before applying the coating.

Recommended surface temperature should be greater than 50°F (10°C) and at least 5°F above the dew point.

Polyprime 21 is very sensitive to heat and moisture. Higher temperatures and/or high humidity will significantly accelerate the cure time and pot life. Use caution in batch sizes and thickness of application.

Low temperature and/or low humidity extend the cure time.

TECHNICAL DATA

Coverage Rate	1 gal/300 sq. ft. 0.135 l/m²
Pot Life, 75°F (24°C) @ 50% R.H.	20-30 min.
Dry Film Thickness per Coat	5 ± 1 mils 127 ± 25 microns
Hardness, ASTM D-2240	70 ± 5 Shore D
Specific Gravity,	
Part-A	1.09
Part-B	1.07
Total Solids, Weight, ASTM D-2369	91%
Total Solids, Volume, ASTM D-2697	90%
Viscosity, at 75°F (24°C),	
Part-A & B combined	600 ± 50 cps
Volatile Organic Compounds,	
ASTM D-2369-81	0.75 lb/gal 90 gm/liter

EQUIPMENT CLEANUP

Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

STORAGE

Polyprime 21 has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers.

LIMITATIONS

Not UV stable.

Surfaces must be dry, clean and free of foreign matter.

Containers that have been opened must be used as soon as possible.

Polyprime 21 is difficult to clean up after it has cured.

Do not dilute Polyprime 21.

Mix no more material than can be used within 20 minutes.

WARNING

This product contains Epoxy Resin and Curatives.

Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local Polycoat Products representative or visit our website for current technical data and instructions.

LIMITED WARRANTY

Polycoat Products warrants its products to be free of manufacturing defects and that they will meet Polycoat Products current published physical properties. Polycoat Products warrants that its products, when properly installed by a state licensed waterproofing contractor according to Polycoat Products guide specifications and product data sheets over a sound, properly prepared substrate, will not allow water migration for a period of one (1) year. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. There are no other warranties by Polycoat Products of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Polycoat Products shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. Polycoat Products shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. Polycoat Products reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

DISCLAIMER

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the users responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Polycoat Products makes no claim that these tests or any other tests, accurately represent all environments.

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POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYPRIME 172 / 172SC

Single Component
Aromatic Urethane Primer
Technical Data Sheet

DESCRIPTION

Polyprime 172 is a single component, liquid applied, aromatic urethane polyurea primer. This primer provides excellent intercoat adhesion. Polyprime 172SC is designed for use in Southern California to be in compliance with air quality standards.

FEATURES

❖One Component
❖Fast Curing
❖For use in SCAQMD areas, use only Polyprime 172SC

TYPICAL USES

❖Intercoat Adhesion for Spray Elastomers

COLOR

Amber

PACKAGING

1 gallon (3.79 liter) can
5 gallon (18.9 liter) pail
55 gallon drum, net fill 50 gallons (189 liters)

MIXING

Before application, Polyprime 172 must be mixed thoroughly. Closed-top metal cans can be shaken or rolled to mix material.

APPLICATION

Polyprime 172 should be applied at the rate of 1 gallon/300 sq.ft. (0.14 liters/m²). It can be applied using an airless sprayer, brush, or phenolic resin core roller.

Allow Polyprime 172 to dry at 70°F (21°C) and 50% relative humidity for one hour before applying the coating.

Recommended surface temperature should be greater than 50°F (10°C) and at least 5°F above the dew point.

Polyprime 172 is very sensitive to heat and moisture. Higher temperatures and/or high humidity will significantly accelerate the cure time.

Low temperature and/or low humidity extend the cure time.

EQUIPMENT CLEANUP

Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

STORAGE

Polyprime 172 has a shelf life of six (6) months from date of manufacture in original, factory-sealed containers.

TECHNICAL DATA, POLYPRIME 172 (250 VOC)
(For Use Outside of SCAQMD Areas)

Coverage Rate	1 gal/300 sq. ft. 0.135 l/m²
Dry Film Thickness per Coat	3.6 ± 0.1 mils 91.4 ± 3 microns
Specific Gravity	1.07
Total Solids by Weight, ASTM D-2369	78 ± 2%
Total Solids by Volume, ASTM D-2697	76 ± 2%
Viscosity at 75°F (24°C)	300 ± 100 cps
Volatile Organic Compounds, ASTM D-2369-81	1.65 lb/gal 197 gm/liter

TECHNICAL DATA, POLYPRIME 172SC (100 VOC)
(For Use in SCAQMD Areas)

Coverage Rate	1 gal/300 sq. ft. 0.135 l/m²
Dry Film Thickness per Coat	3.6 ± 0.1 mils 91.4 ± 3 microns
Specific Gravity	1.15
Total Solids by Weight, ASTM D-2369	74 ± 2%
Total Solids by Volume, ASTM D-2697	76 ± 2%
Viscosity at 75°F (24°C)	300 ± 100 cps
Volatile Organic Compounds, ASTM D-2369-81(excluding exempt solvent)	0.75 lb/gal 90 gm/liter

LIMITATIONS

Not UV stable.

Surfaces must be dry, clean and free of foreign matter.

Containers that have been opened must be used as soon as possible.

Polyprime 172 is difficult to clean up after it has cured.

Do not dilute under any circumstance.

WARNING

This product contains Isocyanates and Solvent.

This product is considered Dangerous Goods. DOT regulations classify it as: **PAINT, Class 3, UN 1263, PG III, FLAMMABLE LIQUID.**

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LIMITED WARRANTY

Polycoat Products warrants its products to be free of manufacturing defects and that they will meet Polycoat Products current published physical properties. Polycoat Products warrants that its products, when properly installed by a state licensed waterproofing contractor according to Polycoat Products guide specifications and product data sheets over a sound, properly prepared substrate, will not allow water migration for a period of one (1) year. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. There are no other warranties by Polycoat Products of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Polycoat Products shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. Polycoat Products shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. Polycoat Products reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

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POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYPRIME 183

Two Component
Aromatic Urethane Polyurea Primer
Technical Data Sheet

DESCRIPTION
Polyprime 183 is a two component, 1:1 ratio, rapid setting, non-sag, liquid applied, aromatic urethane polyurea primer.

FEATURES
- ❖Non-Toxic
- ❖Odorless
- ❖Two Component
- ❖Fast Curing
- ❖Meets USDA Criteria
- ❖Meets California VOC and SCAQMD Requirements

TYPICAL USES
- ❖Polyurea Primer
- ❖Bonding agent for Plastics, Masonry, Wood and EPS.

COLOR
Side-A: Black, Side-B: Clear

PACKAGING
10 gallon kit: One 5 gallon pail of Side-A and One 5 gallon pail of Side-B.

100 gallon kit: One 55 gallon drum (net 50 gallons) Side-A and One 55 gallon drum (net 50 gallons) Side-B.

MIXING
Before application, Polyprime 183 must be mixed thoroughly. Closed-top metal cans can be shaken to mix material.

APPLICATION
Polyprime 183 needs to be conditioned at 75-80°F prior to use.

Polyprime 183 should be applied at the rate of 1 gallon/100 sq.ft. (0.14 liters/m²), using a high pressure, heated, 1:1 spray machine.

Allow Polyprime 183 to dry for 10-30 minutes before applying the coating. Recoat time is two to three hours.

Polyprime 183 can be applied at surface temperatures as low as 10°F (-12°C) and as high as 135°F (57°C).

Polyprime 183 is very sensitive to heat and moisture. Higher temperatures and/or high humidity will significantly accelerate the cure time. Low temperature and/or low humidity extend the cure time.

EQUIPMENT CLEANUP
Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

Cured Product may be disposed of without restriction. Mix excess Side-A and Side-B material and allow to cure.

TECHNICAL DATA

Coverage Rate	1 gal/100 sq.ft. (Varies with substrate and equipment)
Pot Life, 150°F (66°C) @ 50% R.H.	8-10 seconds
Hardness, ASTM D-2240	70 ± 10 D
Specific Gravity,	
Part-A	1.18
Part-B	1.01
Total Solids, Weight, ASTM D-2369	100%
Total Solids, Volume, ASTM D-2697	100%
Volatile Organic Compounds, ASTM D-2369-81	0.0 lb/gal
Recoat Time	2-3 hours

STORAGE
Polyprime 183 has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers.

LIMITATIONS
Not UV stable. Will discolor in exterior applications.

Surfaces must be dry, clean and free of foreign matter.

Containers that have been opened must be used as soon as possible.

Polyprime 183 is difficult to clean up after it has cured.

Do not dilute under any circumstance.

WARNING
This product contains Isocyanates and Curative.

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Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local Polycoat Products representative or visit our website for current technical data and instructions.

SAFETY PRECAUTIONS
This product is for industrial use only by professional applicators and is not intended or suitable for use in or around household or residential property. Keep away from children and household items. This material contains polyisocyanates. Vapors and spray mist are harmful. Improper handling and use may be hazardous. At all times safety precautions must be strictly followed during storage, handling and application.

WARNING
Individuals wiht chronic respiratory problems or prior respiratory reactions to such materials should not be exposed to vapors. All personnel entering the application area, including the applicator must wear properly fitted, NIOSH/MSHA approved, fresh air positive pressure air respirators with a full face piece or an air supplied hood.

Keep the material away from sparks, flash and open flames. Containers, even those that have been emptied, may contain dangerous and explosive vapors. Do not cut, drill, grind, weld or perform similar operations on or near containers. Do not pressurize containers to empty them.

LIMITED WARRANTY
Polycoat Products warrants its products to be free of manufacturing defects and that they will meet Polycoat Products current published physical properties. Polycoat Products warrants that its products, when properly installed by a state licensed waterproofing contractor according to Polycoat Products guide specifications and product data sheets over a sound, properly prepared substrate, will not allow water migration for a period of one (1) year. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. There are no other warranties by Polycoat Products of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Polycoat Products shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. Polycoat Products shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. Polycoat Products reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

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POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYPRIME 3042

Polyamine Epoxy Primer/Sealer

DESCRIPTION

Polyprime 3042 is a two component, high solids, liquid applied primer. This primer has been developed for use on carbon steel, non-ferrous metal, fiberglass, PVC pipe, as well as concrete and masonry.

FEATURES

- ❖100% Solids
- ❖Low Viscosity Epoxy Coating
- ❖Surface Tolerant Primer Sealer
- ❖Provides Limited Chemical Resistance
- ❖Versatile Application: Spray, Roll or Brush

TYPICAL USES

- ❖Mining and Milling Industry
- ❖Pulp and Paper Industry
- ❖Steel Structures and Bridges
- ❖Food Processing Facilities
- ❖Concrete Floors and Decks
- ❖Power Generating Plants
- ❖Water and Wastewater Treatment Plants
- ❖Chemical and Pharmaceutical Industries
- ❖Petrochemical Plants
- ❖Storage Tanks
- ❖Industrial Flooring

TYPICAL APPLICATIONS

To be used as a primer over Carbon Steel, Galvanized Steel, Aluminum, Existing Coating, and Concrete. It is to be topcoated with Polycoat's plural component spray systems such as Polyeuro® 1050H, Polyeuro® 5502, Polyeuro® MPL or polyaspartic topcoats such as Polycoat-Staingard 6000 or 6072, as well as with moisture cured urethane systems, such as Polyglaze 100, Polycoat-Staingard 1110, or Diamondglaze 1000.

COLORS

Grey with a medium sheen gloss.

Custom colors are also available with a minimum order of 100 gallons (379 liters). See color chart for special provisions.

PACKAGING

3 Gallon Kit: Two 1 gallon cans of Side-A and One 1 gallon can of Side-B.

15 Gallon Kit: Two 5 gallon pails of Side-A and One 5 gallon pail of Side-B.

MIXING

The volume mixing ratio is 2 parts Side-A to 1 part Side-B. Do not estimate.

Polyprime 3042 Side-A and Side-B should be thoroughly mixed individually prior to combining to ensure a homogeneous material. The combined components should be thoroughly mixed using a mechanical mixer at slow speed.

TECHNICAL DATA

Coverage Rate	1 gal/300 sq. ft. 0.135 l/m²
Pot Life, 75°F (24°C) @ 50% R.H.	20-30 min.
Dry Film Thickness per Coat	5 ± 1 mils 127 ± 25 microns
Hardness, ASTM D-2240	70 ± 5 Shore D
Specific Gravity,	
Part-A	1.09
Part-B	1.07
Viscosity, at 75°F (24°C),	
Part-A & B combined	600 ± 50 cps
Volatile Organic Compounds,	
ASTM D-2369-81	0.75 lbs/gal 90 gm/liter
Sag Resistance @ 75°F	5-6 mil

APPLICATION DATA

Apply over prepared or suitably prepared carbon steel, galvanized steel, concrete or aluminum.

Surface Preparation Method:
Carbon Steel: SSSP-SP-2, 3, 6 or SP-12 (WJ-3).
Aluminum: Alondine®, Alumiprep® or light abrasive blast.
Galvanized Steel: Galvaprep or light abrasive blast.
Concrete: SSSP-SP-7 Brush-Off Blast.

SURFACE PREPARATION

In general, coating performance is directly proportional to surface preparation. All surfaces must be free of oil, grease, dirt and other contaminants.

Carbon Steel: Use SSSP Guidelines for surface preparation acceptable systems include SP-6 (Commercial Blast), SP-3 (Power Tool/Hand Tool).

Aluminum: Remove oil, grease, dirt and other contaminants with neutral detergent and treat with Alondine® 1200 or equal. Light brush blasting is also acceptable.

Galvanized Steel: Remove all contaminants such as oil, grease, dirt or residues with a neutral detergent and treat with Galvaprep®.

Existing Coatings: Use SSSP guidelines for re-coating methods, recommended systems are SP-7 Abrasive blast or SP-3 Power Tool cleaning. Pressurized water at 2000 psi may also be used in conjunction with abrasive blasting or Power tool cleaning. A test area should be accomplished before topcoating.

Concrete: Pressure wash (2000-3000 psi) with clean fresh water in conjunction with biodegradable cleanser if necessary to remove all contaminants. Surface shall be dry and free of all oils, wax or any loose sealers or coatings. Use SSSP guidelines for abrading the surface such as SP-7 Brush-off blast cleaning.

See Specification Guide for further detail.

APPLICATION

Application temperature for Polyprime 3042 should be between 60-90°F. Do not apply product unless temperature is at least 5° above the dew point. Re-coat schedule is 2-36 hours dependent upon environment. See Specification Guide for re-coating guidelines and additional information.

Airless Spray: Use Graco 28:1 pump or higher, Binks “Airless” spray gun with Reversa-Clean 0.017-0.019 spray tips with a 1” fluid line, adjust pump pressure to the lowest possible setting that provides proper atomization. Equipment of equal performance is acceptable.

Conventional Spray: Variations of conventional production spray equipment such as pressure pot, air assisted airless or high volume, low pressure systems as supplied by Binks, Graco, Nordson, Devilbiss or equal may be used. See Specification Guide for additional information.

Brush: Use mohair or natural bristle brush with feather edge.

Roller: Use phenolic core, short nap sheepskin or equal natural roller covers.

EQUIPMENT CLEANUP

Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

STORAGE

Polyprime 3042 has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers.

LIMITATIONS

The uncured materials used in Polyprime 3042 are very sensitive to heat and moisture. Higher temperature and/or high humidity will accelerate the cure time. Use caution in batch sizes and thickness of application. Low temperature and/or low humidity extends the cure time and the use of accelerators may be necessary.

All surfaces to receive Polyprime 3042 must meet all applicable building and safety codes in the prescribed city, county, state, or other jurisdiction.

The substrate must be structurally sound and sloped for proper drainage.

No liability is assumed by Polycoat Products for substrate defects, any improper surface preparation, and/or improper application.

WARNING

This product contains Epoxy Resin and Curatives.

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYPRIME EBF-LV

High Solids
Epoxy-Polyamine Filler Surfacer
Technical Data Sheet

DESCRIPTION
Polyprime EBF-LV is a two component, high solids, liquid applied, epoxy-polyamine filler surfacer with the unique characteristic of sealing pores in concrete.

FEATURES
- ❖Low Odor
- ❖Solvent Free
- ❖High Solids
- ❖Excellent Adhesion

TYPICAL USES
- ❖Concrete
- ❖Polyurethane Elastomeric Surfaces

COLORS
Part-A: Black, Part-B: White

PACKAGING
2 gallon kit: One 1 gallon can of Part-A Black Liquid and One 1 gallon can of Part-B White Liquid.

10 gallon kit: One 5 gallon pail of Part-A Black Liquid and One 5 gallon pail of Part-B White Liquid.

MIXING
The volume mixing ratio is 1 part Side-A Black Liquid to 1 part Side-B White Liquid. Do not estimate.

Polyprime EBF-LV Part-A and Part-B should be thoroughly mixed individually prior to combining to ensure a homogeneous material. The combined components should be thoroughly mixed using a mechanical mixer at slow speed.

APPLICATION
Polyprime EBF-LV can be applied using a flat squeegee, phenolic resin core roller, or trowel.

COVERAGE RATE
One gallon per 200 square feet in general, and the coverage rate will vary depending on the porosity of the substrate.

Allow Polyprime EBF-LV to become tack free before applying the coating.

Recommended surface temperature should be greater than 50°F (10°C) and at least 5°F above the dew point.

Polyprime EBF-LV is very sensitive to heat. Higher temperatures will significantly accelerate the cure time and pot life. Use caution in batch sizes and thickness of application.

Low temperature will extend the cure time.

TECHNICAL DATA	
Coverage Rate	varies with substrate
Pot Life, 75°F (24°C) @ 50% R.H.	30-45 min.
Hardness, ASTM D-2240	70 ± 5 Shore D
Specific Gravity,	
Part-A	1.34
Part-B	1.97
Total Solids, Weight, ASTM D-2369	94.5%
Total Solids, Volume, ASTM D-2697	91.4%
Viscosity, at 75°F (24°C),	
Part-A & B combined	30 ± 5 poise
Volatile Organic Compounds,	
ASTM D-2369-81	0.75 lb/gal 91 gm/liter

EQUIPMENT CLEANUP
Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

STORAGE
Polyprime EBF-LV has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers.

LIMITATIONS
Not UV stable.

Surfaces must be dry, clean and free of foreign matter.

Containers that have been opened must be used as soon as possible.

Polyprime EBF-LV is difficult to clean up after it has cured.

Do not dilute Polyprime EBF-LV.

Mix no more material than can be used within 20 minutes.

WARNING
This product contains Epoxy Resin and Curatives.

Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local Polycoat Products representative or visit our website for current technical data and instructions.

LIMITED WARRANTY

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POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® LP-12

Chemical Resistance Spot Testing

The following chemical resistance spot testing data were obtained from a 70-75 mils film of Polyeuro® LP-12 in each chemical listed below at 70-75°F for a period of 72-96 hours. Like other industrial maintenance coatings, Polyeuro® LP-12 has chemical and temperature limitations. Please read the disclaimer below. For chemicals other than those listed below, proper testing must be completed prior to application of the coating system. It is advisable to consult your local Polycoat Products representative.

CHEMICAL SOLVENTS:

Acetone	4
Hexane	1
Motor Oil	2
Gasoline (unleaded)	1
Hydraulic Oil	2
Methanol	4
Xylol	4
Methylene Chloride	4

ACIDS AND BASES:

Sulphuric Acid 10%	1
Sulphuric Acid 25%	2
Sulphuric Acid 50%	4
Sulphuric Acid 60%	4
Acetic Acid 2%	1
Acetic Acid 5%	3/5
Acetic Acid 10%	3/5
Acetic Acid 50%	4
Formic Acid 2%	1
Formic Acid 5%	1
Formic Acid 10%	4
Phosphoric Acid, 25%	1
Phosphoric Acid, 50%	2
Lactic Acid, 45%	2
Hydrocholric Acid 37%	4
Nitric Acid 10%	2

ACIDS AND BASES, cont'd.:

Linseed Fatty Acid	1
Boracic Acid, 4%	2
Tannic Acid, 20%	1
Caustic Soda Lye, 10%	1
Caustic Soda Lye, 40%	2
Caustic Soda Lye, 50%	2
Potash Lye, 20%	1
Chlorine Lye, 3%	2
Sugar Solution, 30%	1
Saline Solution, 30%	1
Ammonia, 5%	1
Soda Solution, 20%	2
Citric Acid, 10%	1

CHART KEYS:

1: No visible damage
2: Little visible damage
3: Some effect swelling, discoloration, cracking
4: Not recommended
5: Satisfactory for splash, spillage and secondary containment (72-96 hours)

POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYEURO® MPL 11 / MPL 55

Chemical Resistance Spot Testing

The following chemical resistance spot testing data were obtained from a 70-75 mils film of Polyeuro® MPL 11/MPL 55 in each chemical listed below at 70-75°F for a period of 72-96 hours. Like other industrial maintenance coatings, Polyeuro® MPL 11/MPL 55 has chemical and temperature limitations. Please read the disclaimer below. For chemicals other than those listed below, proper testing must be completed prior to application of the coating system. It is advisable to consult your local Polycoat Products representative.

CHEMICAL SOLVENTS:

Xylene	4
Toluene	4
Acetone	3/5
2 Methyl Butane	1
MTBE	3/5
HEXANE	3/5
Motor Oil	2
Gasoline (unleaded)	1
Diesel	1
Brake Fluid	2
Hydraulic Oil	1
Methanol	4

ACIDS AND BASES:

Sewage	1
Hydrogen Sulphide gas (H_2S gas)	1
Hydrocholric Acid 35%	4
Hydrochloric Acid 10%	1
Hydrochloric Acid 5%	1
Propylene Carbonate	3
Lactic Acid, 45%	2
Phosphoric Acid, 10%	1
Ammonium Hydroxide 10%	1
Ammonium Hydroxide 20%	1
Sodium Hydroxide 50%	2
Salt Water (30%)	1
Drinking Water	1
De-Ionized Water	1

ACIDS AND BASES, cont'd.:

Sulphuric Acid 60%	4
Sulphuric Acid 30%	5
Sulphuric Acid 10%	1
Sulphuric Acid 5%	1
Potassium Hydroxide 10%	1
Potassium Hydroxide 20%	2
Sodium Hydroxide 10%	1
Sodium Hydroxide 20%	2
10-30% Sugar/Water	1
Acetic Acid 2%	1
Acetic Acid 5%	1
Acetic Acid 10%	1
Acetic Acid 50%	4
Formic Acid 2%	1
Formic Acid 5%	1
Formic Acid 10%	2

CHART KEYS:

1: No visible damage
2: Little visible damage
3: Some effect swelling, discoloration, cracking
4: Not recommended
5: Satisfactory for splash, spillage and secondary containment (72-96 hours)

CHEMICAL RESISTANCE CHART FOR POLYEURO® 5502

The following chemical resistance data were obtained from a 70-75 mils film of POLYEURO®5502 immersed in each chemical listed below at 70-75 degF for a period of 7 days. Like other industrial maintenance coatings, POLYEURO®5502 has chemical and temperature limitations. Please read the disclaimer below. For chemicals other than those listed below, proper testing must be completed prior to application of the coating system. It is advisable to consult your local Polycoat representative.

CHEMICAL SOLVENTS		CHEMICAL SOLVENTS	
Xylene	4	Motor Oil	2
Toluene	4	Gasoline (unleaded)	1
Acetone	2	Diesel	1
2 Methyl Butane	1	Brake Fluid	2
MTBE	2	Hydraulic Oil	1
HEXANE	2	Methanol	4

ACIDS and BASES			
Sewage	1	Sulphuric Acid 60%	4
Hydrogen Sulphide gas (H_2S gas)	1	Sulphuric Acid 30%	5
Hydrocholric Acid 35%	4	Sulphuric Acid 10%	1
Hydrochloric Acid 10%	1	Sulphuric Acid 5%	1
Hydrochloric Acid 5%	1	Potassium Hydroxide 10%	1
Propylene Carbonate	3	Potassium Hydroxide 20%	2
Acetic Acid, 10%	1	Sodium Hydroxide 10%	1
Phosphoric Acid, 10%	1	Sodium Hydroxide 20%	2
Ammonium Hydroxide 10%	1	10% Sugar/Water	1
Ammonium Hydroxide 20%	1		
Sodium Hydroxide 50%	2		
Salt Water (10%)	1		
Drinking Water	1		
De-Ionized Water	1		

CHART KEYS:

1: no visible damage
2: little visible damage
3: some effect swelling, discoloration, cracking
4: not recommended
5: satisfactory for splash, spillage and secondary containment (72-96 hours)

POLYCOAT PRODUCTS
A Division of American Polymers Corp.
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POLYEURO® 5502
CHEMICAL RESISTANT

CHEMICAL RESISTANCE CHART FOR POLYEURO® 5901

The following chemical resistance data were obtained from a 70-75 mils film of POLYEURO®5901 immersed in each chemical listed below at 70-75 degF for a period of 7 days. Like other industrial maintenance coatings, POLYEURO®5901 has chemical and temperature limitations. Please read the disclaimer below. For chemicals other than those listed below, proper testing must be completed prior to application of the coating system. It is advisable to consult your local Polycoat representative.

CHEMICAL SOLVENTS	
Xylene	4
Toluene	4
Acetone	2
2 Methyl Butane	1
MTBE	2
HEXANE	2

CHEMICAL SOLVENTS	
Motor Oil	2
Gasoline (unleaded)	1
Diesel	1
Brake Fluid	2
Hydraulic Oil	1
Methanol	4

ACIDS and BASES	
Sewage	1
Hydrogen Sulphide gas (H_2S gas)	1
Hydrocholric Acid 35%	5
Hydrochloric Acid 10%	1
Hydrochloric Acid 5%	1
Propylene Carbonate	3
Acetic Acid, 10%	1
Phosphoric Acid, 10%	1
Ammonium Hydroxide 10%	1
Ammonium Hydroxide 20%	1
Sodium Hydroxide 50%	2
Salt Water (10%)	1
Drinking Water	1
De-Ionized Water	1

Sulphuric Acid 60%	4
Sulphuric Acid 30%	5
Sulphuric Acid 10%	1
Sulphuric Acid 5%	1
Potassium Hydroxide 10%	1
Potassium Hydroxide 20%	2
Sodium Hydroxide 10%	1
Sodium Hydroxide 20%	2
10% Sugar/Water	1

CHART KEYS:

1: no visible damage
2: little visible damage
3: some effect swelling, discoloration, cracking
4: not recommended
5: satisfactory for splash, spillage and secondary containment (72-96 hours)

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POLYEURO® 5901
CHEMICAL RESISTANT

CHEMICAL RESISTANCE CHART FOR POLYEURO® 7502

The following chemical resistance data were obtained from a 70-75 mils film of POLYEURO®7502 immersed in each chemical listed below at 70-75 degF for a period of 7 days. Like other industrial maintenance coatings, POLYEURO®7502 has chemical and temperature limitations. Please read the disclaimer below. For chemicals other than those listed below, proper testing must be completed prior to application of the coating system. It is advisable to consult your local Polycoat representative.

CHEMICAL SOLVENTS		CHEMICAL SOLVENTS	
Xylene	4	Motor Oil	2
Toluene	4	Gasoline (unleaded)	3
Acetone	4	Diesel	1
2 Methyl Butane	4	Brake Fluid	3
MTBE	4	Hydraulic Oil	3
Hexane	4	Methanol	3

ACIDS and BASES			
Sewage	3	Sulphuric Acid 60%	4
Hydrogen Sulphide gas (H_2S gas)	4	Sulphuric Acid 30%	4
Hydrocholric Acid 35%	4	Sulphuric Acid 10%	2
Hydrochloric Acid 10%	2	Sulphuric Acid 5%	2
Hydrochloric Acid 5%	2	Potassium Hydroxide 10%	1
Propylene Carbonate	3	Potassium Hydroxide 20%	2
Acetic Acid, 10%	2	Sodium Hydroxide 50%	2
Phosphoric Acid, 10%	2	Sodium Hydroxide 25%	1
Ammonium Hydroxide 10%	1	Sodium Hydroxide 10%	1
Ammonium Hydroxide 20%	2	Sodium Hydroxide 5%	1
Salt Water (10%)	1	10% Sugar/Water	1
Drinking Water	1	De-Ionized Water	1

CHART KEYS:

1: no visible damage
2: little visible damage
3: some effect swelling, discoloration, cracking
4: not recommended
5: satisfactory for splash, spillage and secondary containment (72-96 hours)

POLYCOAT PRODUCTS
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POLYEURO® 7502
CHEMICAL RESISTANT

CHEMICAL RESISTANCE CHART FOR TUFFSHIELD™ 801

The following chemical resistance data were obtained from a 70-75 mils film of TUFFSHIELD™ 801 immersed in each chemical listed below at 70-75 degF for a period of 7 days. Like other industrial maintenance coatings, TUFFSHIELD™ 801 has chemical and temperature limitations. Please read the disclaimer below. For chemicals other than those listed below, proper testing must be completed prior to application of the coating system. It is advisable to consult your local Polycoat representative.

CHEMICAL SOLVENTS	
Xylene	4
Toluene	4
Acetone	3
2 Methyl Butane	1
MTBE	2
HEXANE	2

CHEMICAL SOLVENTS	
Motor Oil	2
Gasoline (unleaded)	1
Diesel	1
Brake Fluid	2
Hydraulic Oil	1
Methanol	4
Crude Sludge	1

ACIDS and BASES	
Sewage	1
Hydrogen Sulphide gas (H_2S gas)	1
Hydrocholric Acid 35%	4
Hydrochloric Acid 10%	1
Hydrochloric Acid 5%	1
Propylene Carbonate	3
Acetic Acid, 10%	1
Phosphoric Acid, 10%	1
Ammonium Hydroxide 10%	1
Ammonium Hydroxide 20%	1
Sodium Hydroxide 50%	2
Salt Water (10%)	1
Drinking Water	1
De-Ionized Water	1

Sulphuric Acid 60%	4
Sulphuric Acid 30%	5
Sulphuric Acid 10%	1
Sulphuric Acid 5%	1
Potassium Hydroxide 10%	1
Potassium Hydroxide 20%	2
Sodium Hydroxide 10%	1
Sodium Hydroxide 20%	2
10% Sugar/Water	1

CHART KEYS:

1: no visible damage
2: little visible damage
3: some effect swelling, discoloration, cracking
4: not recommended
5: satisfactory for splash, spillage and secondary containment (72-96 hours)

POLYCOAT PRODUCTS
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TUFFSHIELD™ 801
CHEMICAL RESISTANT

CHEMICAL RESISTANCE CHART FOR POLYEURO® 8245

Specifically designed to have better Acid and Bases Chemical Resistance Property.

The following chemical resistance data were obtained from a 70-75 mils film of POLYEURO®8245 immersed in each chemical listed below at 70-75 degF for a period of 30 days. Like other industrial maintenance coatings, POLYEURO®8245 has chemical and temperature limitations. Please read the disclaimer below. For chemicals other than those listed below, proper testing must be completed prior to application of the coating system. It is advisable to consult your local Polycoat representative.

CHEMICAL SOLVENTS	
Xylene	4
Toluene	4
Acetone	4
2 Methyl Butane	4
MTBE	4
HEXANE	4

ACIDS and BASES	
Potassium Hydroxide 10%	1
Potassium Hydroxide 20%	1
Sodium Hydroxide 10%	1
Sodium Hydroxide 20%	1
10% Sugar/Water	1
Propylene Carbonate	3
Ammonium Hydroxide 10%	1
Ammonium Hydroxide 20%	1
Sodium Hydroxide 50%	1
Salt Water (10%)	1
Drinking Water	1
De-Ionized Water	1

CHEMICAL SOLVENTS	
Motor Oil	2
Gasoline (unleaded)	5
Diesel	1
Brake Fluid	2
Hydraulic Oil	1
Methanol	4

ACIDS and BASES	
Sewage	1
Hydrogen Sulphide gas (H_2S gas)	1
Hydrocholric Acid 35%	4
Hydrochloric Acid 10%	1
Hydrochloric Acid 5%	1
Acetic Acid, 50%	5
Phosphoric Acid, 10%	1
Sulphuric Acid 97%	4
Sulphuric Acid 50%	1
Sulphuric Acid 30%	1
Sulphuric Acid 10%	1
Sulphuric Acid 5%	1
Glacial Acetic Acid	4
Nitric Acid 25%	5
Nitric Acid 50%	4
Nitric Acid 70%	4
Hydro Flouric Acid 10%	5
Hydro Flouric Acid 30%	4
Hydro Flouric Acid 50%	4

CHART KEYS:

1: no visible damage
2: little visible damage
3: some effect swelling, discoloration, cracking
4: not recommended
5: satisfactory for splash, spillage and secondary containment (72-96 hours)

POLYCOAT PRODUCTS
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POLYEURO® 8245
CHEMICAL RESISTANT

CHEMICAL RESISTANCE CHART FOR POLY-CAULK® 80A

The following chemical resistance data were obtained from a 70-75 mils film of POLY-CAULK®80A immersed in each chemical listed below at 70-75° F for a period of 3 days. Like other industrial maintenance coatings, POLY-CAULK®80A has chemical and temperature limitations. Please read the disclaimer below. For chemicals other than those listed below, proper testing must be completed prior to application of the coating system. It is advisable to consult your local Polycoat representative.

CHEMICAL SOLVENTS		CHEMICAL SOLVENTS	
MEK	4	Brake Fluid	4
MTBE	4	Gasoline (unleaded)	3
Toluene	3/4	Diesel	3
Acetone	3	Skydrol	3
IPA	2	Methanol	2
		Motor Oil	2
		Hydraulic Oil	2

ACIDS and BASES			
Sewage	1	Sulphuric Acid 60%	4
Hydrogen Sulphide gas (H_2S gas)	1	Sulphuric Acid 30%	4
Anti-Freeze	3	Sulphuric Acid 10%	1
Hydrochloric Acid 10%	1	Sulphuric Acid 5%	1
Hydrochloric Acid 5%	1	Potassium Hydroxide 10%	1
Propylene Carbonate	3	Potassium Hydroxide 20%	2
Acetic Acid, 10%	1	Sodium Hydroxide 10%	1
Phosphoric Acid, 10%	1	Sodium Hydroxide 20%	2
Ammonium Hydroxide 10%	1	10% Sugar/Water	1
Ammonium Hydroxide 20%	1	Clorox 10% Water	1
Salt Water (10%)	1	Hydroflouric Acid	4
Drinking Water	1	Sodium Bicarbonate (20%)	1
De-Ionized Water	1	Vinegar 5% Water	1

CHART KEYS:

1: no visible damage
2: little visible damage, slight swelling
3: some effect swelling, discoloration, cracking
4: not recommended
5: satisfactory for splash, spillage and secondary containment (48-72 hours)

POLYCOAT PRODUCTS
A Division of American Polymers Corp.
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POLY-CAULK® 80A
CHEMICAL RESISTANT

CHEMICAL RESISTANCE CHART FOR POLYCOAT-STAINGARD 6000 & 6072

he following chemical resistance data were obtained from a 70-75 mils film of Polycoat-Staingard 6000 / 6072 immersed in each chemical listed below at 70-75 degF for a period of 7 days. Like other industrial maintenance coatings, Polycoat-Staingard 6000 / 6072 has chemical and temperature limitations. Please read the disclaimer below. For chemicals other than those listed below, proper testing must be completed prior to application of the coating system. It is advisable to consult your local Polycoat representative.

CHEMICAL SOLVENTS

Xylene	4	Motor Oil	1
Toluene	4	Gasoline (unleaded)	1
Isoproply Alcohol	3	Brake Fluid	4
Methyl Ethyl Ketone	4	Transmission Fluid	1
		Skydrol	4

ACIDS and BASES

Hydrochloric Acid 10%	1	Potassium Hydroxide 10%	2
Hydrochloric Acid 5%	1	Potassium Hydroxide 20%	2
Propylene Carbonate	3	Sodium Hydroxide 10%	2
Acetic Acid, 10%	1	Sodium Hydroxide 20%	2
Phosphoric Acid, 10%	1	10% Sugar/Water	1
Sulphuric Acid 60%	4	Drinking Water	1
Sulphuric Acid 10%	1	De-Ionized Water	1
Sulphuric Acid 5%	1		

CHART KEYS:

1: no visible damage
2: little visible damage
3: some effect swelling, discoloration, cracking
4: not recommended
5: satisfactory for splash, spillage and secondary containment (72-96 hours)

POLYCOAT PRODUCTS
A Division of American Polymers Corp.
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POLYCOAT-STAINGARD 6000 & 6072
CHEMICAL RESISTANT

Product Certification

PRESENTED TO:

American Polymer Corp. (d.b.a.) Polycoat Products

The Following Product has been Evaluated by TRUESDAIL LABORATORIES, INC., and Found to Meet the Specifications of

ANSI/NSF 61 SECTION 5:

POLYURETHANE BARRIER MATERIAL
POLYEURO 5502-NSF

John C. Hill, Ph.D., President

7/24/08
Date

MEETS ANSI/NSF 61-5 (2007)

ANSI Accredited Program
PRODUCT CERTIFICATION

THIS CERTIFICATION MARK MAY BE USED TO THE APPROVED PRODUCTS AND TO THEIR PACKAGING OR DESCRIPTIVE LITERATURE.

CERTIFICATE EXPIRES: 12/31/2013

SGS

CLIENT: POLYCOAT PRODUCTS
14722 Spring Avenue
Santa Fe Springs, CA 90670
Ashish Dhuldoya

Test Report No: 914:011584	**Date: April 3, 2008**

SAMPLE ID: The Client submitted and identified the following test material as MLP 11 FR coating applied to cement board substrate.

DATE OF RECEIPT: Entered into SGS USTC sample tracking system on March 14, 2008.

TESTING PERIOD: March 29, 2008.

AUTHORIZATION: Testing authorized by Ashish Dhuldoya.

TEST REQUESTED: Perform standard flame spread and smoke density developed classification tests on the sample supplied by the Client in accordance with ASTM Designation E84-07, "Standard Method of Test for Surface Burning Characteristics of Building Materials". The foregoing test procedure is comparable to UL 723, ANSI/NFPA No. 255, and UBC No. 8-1.

TEST RESULTS:

Flame Spread	**Smoke Developed**
25	185

For detailed results see page 2.

Tested by

Brian Ortega
Test Technician

Signed for and on behalf of SGS U.S. Testing Company Inc.

Greg Banasky
Supervisor Fire Technology

PREPARATION AND CONDITIONING: The sample material was submitted in three pieces, 22" wide by 96" long, conforming to test chamber dimensions.

E 84 TEST DATA SHEET:

CLIENT: Polycoat Products **DATE:** 03/29/08

SAMPLE: MLP 11 FR coating applied to cement board substrate

FLAME SPREAD:

IGNITION: 58 seconds

FLAME FRONT: 6 feet maximum

TIME TO MAXIMUM SPREAD: 2 minutes, 32 seconds

TEST DURATION: 10 minutes

CALCULATION: 50.67 x 0.515 = 26.09

SUMMARY: FLAME SPREAD: 25 **SMOKE DEVELOPED:** 185

SUMMARY OF ASTM E84 RESULTS: Because of the possible variations in reproducibility, the results are adjusted to the nearest figure divisible by 5. Smoke Developed values over 200 are rounded to the nearest figure divisible by 50.

In order to obtain the Flame Spread Classification, the above results should be compared to the following table:

NFPA CLASS	UBC CLASS	FLAME SPREAD	SMOKE DEVELOPED
A	I	0 through 25	Less than or equal to 450
B	II	26 through 75	Less than or equal to 450
C	III	76 through 200	Less than or equal to 450

BUILDING CODES CITED:

1. National Fire Protection Association, ANSI/NFPA No. 101, "Life Safety Code", 1994 Edition.

2. Uniform Building Code, 1994 Edition, Chapter 8, Interior Finishes, Sections 801-807.

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End of Report

SGS

CLIENT: POLYCOAT PRODUCTS
14722 Spring Avenue
Santa Fe Springs, CA 90670
Hemant Prajapati

Test Report No: 062008FT	**Date: June 20, 2008**

SAMPLE ID: The Client submitted and identified the following test material as Polyeuro MH 752FR coating applied to cement board substrate.

DATE OF RECEIPT: Entered into SGS USTC sample tracking system on June 16, 2008.

TESTING PERIOD: June 17, 2008.

AUTHORIZATION: Testing authorized by hemant Prajapati.

TEST REQUESTED: Perform standard flame spread and smoke density developed classification tests on the sample supplied by the Client in accordance with ASTM Designation E84-07, "Standard Method of Test for Surface Burning Characteristics of Building Materials". The foregoing test procedure is comparable to UL 723, ANSI/NFPA No. 255, and UBC No. 8-1.

TEST RESULTS:

Flame Spread	**Smoke Developed**
25	175

For detailed results see page 2.

Tested by

Brian Ortega
Test Technician

Signed for and on behalf of SGS U.S. Testing Company Inc.

Greg Banasky
Supervisor Fire Technology

PREPARATION AND CONDITIONING: The sample material was submitted in three pieces, 22" wide by 96" long, conforming to test chamber dimensions.

E 84 TEST DATA SHEET:

CLIENT: Polycoat Products **DATE:** 06/17/08

SAMPLE: Polyeuro MH 752FR coating applied to cement board substrate

FLAME SPREAD:

IGNITION: 49 seconds

FLAME FRONT: 5 feet maximum

TIME TO MAXIMUM SPREAD: 1 minute, 40 seconds

TEST DURATION: 10 minutes

CALCULATION: 44.12 x 0.515 = 22.72

SUMMARY: FLAME SPREAD: 25 **SMOKE DEVELOPED:** 175

SUMMARY OF ASTM E84 RESULTS: Because of the possible variations in reproducibility, the results are adjusted to the nearest figure divisible by 5. Smoke Developed values over 200 are rounded to the nearest figure divisible by 50.

In order to obtain the Flame Spread Classification, the above results should be compared to the following table:

NFPA CLASS	UBC CLASS	FLAME SPREAD	SMOKE DEVELOPED
A	I	0 through 25	Less than or equal to 450
B	II	26 through 75	Less than or equal to 450
C	III	76 through 200	Less than or equal to 450

BUILDING CODES CITED:

1. National Fire Protection Association, ANSI/NFPA No. 101, "Life Safety Code", 1994 Edition.

2. Uniform Building Code, 1994 Edition, Chapter 8, Interior Finishes, Sections 801-807.

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End of Report

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KTA-TATOR, INC.
115 Technology Drive, Pittsburgh, PA 15275

June 8, 2005

Mr. Ashish Dhuldhoya
Polycoat Products
14722 Spring Avenue
Santa Fe Springs, CO 90670

SUBJECT: Results of Physical Testing; KTA Project No. 250065

Dear Mr. Dhuldhoya:

In accordance with Proposal Number PN040466, KTA-Tator, Inc. (KTA) has analyzed samples of Polyeuro® 5502 coating membrane to determine various physical characteristics as outlined below. This report describes the testing procedures employed and contains the results of the testing.

SAMPLES

The following samples were received at the KTA laboratory from Mark Malloy of KTA on March 25, 2005:

Samples KTA-1 through KTA-12 – Twelve (12) 4" x 6" steel panels coated black on one side, labeled "KTA-1 through 12".

Samples KTA-13 and KTA-14 – Two (2) 12" x 16" free films of black coating material, labeled "Sample A" and "Sample B, 2/17/05."

The following samples were received from Polycoat Products on April 25, 2005:

Sample KTA-15 - One pint can Polyeuro 5502 part A and one pint can Polyeuro 5502 part B.

LABORATORY INVESTIGATION

The laboratory investigation consisted of testing samples of Polyeruo 5502 for water vapor permeability, chemical resistance (Atlas cell), water absorption, tensile strength, modulus of elongation and elasticity, compressive strength, impact resistance, tensile adhesion, physical property retention following immersion, impact, thermal cycling, and UV light exposure, shrinkage, thermal expansion, and maximum withstanding temperature. The sample could not

be evaluated for flexural strength due to the highly flexible nature of the material. The results of the testing are provided below.

Water Vapor Permeability

Four disks of the coating material (one designated as the control sample) were cut from the large sheets (KTA-13 & 14) and tested for water vapor permeability using the desiccant method of ASTM-E 96, "Standard Test Methods for Water Vapor Transmission of Materials." Each disk was placed over a 4" diameter dish filled with anhydrous calcium chloride. The disks were secured to the top of the dishes by placing non-permeable wax around the outside perimeter to prevent exposure of the desiccant to the atmosphere. The dishes were then weighed and placed into a temperature/humidity chamber maintained at 32.0°C and 54% relative humidity for thirty-four (34) days. The dishes were weighed separately at various recorded intervals, and the results plotted as weight (grams) versus time (hours). The water vapor permeability was then calculated by using the slope of the graph, as well as thickness and area of the disks. The average permeability in units of perm-inches are reported in Table 1 below. Individual data for each replicate sample is appended.

Table 1 – Water Vapor Permeability Results (Average of 3 Data Points)

Replicate ID	Permeability (perm-inches)
A, B, C	0.00042

Chemical Resistance (Atlas Cell) Testing

Chemical resistance (Atlas cell) testing was performed in accordance with ASTM-C 868, "Test Method for Chemical Resistance of Protective Linings," using a modified Corrocells (a.k.a. "Atlas Cells") due to the size of the submitted samples. The Corrocell ("Atlas Cell") employed was a round glass vessel with one open end as opposed to two open ends. The cell was partially filled with the test liquid (potable water) to create two test phases. The top half of the specimen was subjected to the "vapor phase" of the environment while the lower half was exposed to the "liquid phase." The test duration was 30 days (720 hours). The panel was visually examined every 72 hours for blistering in each phase (vapor and liquid). Blistering was rated after 720 hours of exposure according to ASTM-D 714, "Evaluating Degree of Blistering of Paints." By this method, blisters are rated for both size and frequency on a scale of 10 (none) (no blistering) to 0 (large blisters). Frequency is rated as few (F), medium (M), medium dense (MD), or dense (D). Photographic references in the method depict blister sizes No. 8, No. 6, No. 4, and No. 2, for each of the four frequencies. The chemical resistance testing revealed no blistering in either the liquid or vapor phases.

Water Absorption

The water absorption of the coating material was evaluated in accordance with ASTM C 413, "Standard Test Method for Absorption of Chemical Resistant Mortars, Grouts, and Monolithic Surfacings and Polymer Concretes." The liquid coating was mixed according to the manufacturer's instructions and poured into cylindrical molds. Due to the amount of liquid

coating material provided and short pot life of the coating (2-4 seconds), three replicate determinations were made. The average result of the water absorption determinations was 2.12%.

Tensile and Yield Strength

The tensile and yield strength of the coating material were determined in accordance with ASTM D 882, "Standard Test Method for Tensile Properties of Thin Plastic Sheeting." Five replicate specimens were prepared by cutting straight (1/2" wide) specimens from the free film material. The specimens were tested with a Tinius Olsen Universal Testing Machine at a pull rate of 4.5 inches per minute. The specimens had to be continuously tightened into the apparatus throughout the testing to prevent slipping, thus creating variation in the replicate results. The tensile strength was calculated using the force required to break the specimens and the thickness of each. The yield strength was determined for the associated stress-strain curve of each replicate. The results of the testing are provided in Table 2 below.

Table 2 – Results of Tensile and Yield Strength Testing

Replicate ID	Cross-Section Area (in^2)	Tensile Strength (psi)	Average Tensile Strength	Yield Strength (psi)	Average Yield Strength
A	.055	1640	1870 psi	730	740 psi
B	.056	1770		710	
C	.049	2060		610	
D	.051	2060		880	
E	.056	1840		770	

Modulus of Elongation and Elasticity

The modulus of elongation and elasticity of the coating material was determined in accordance with ASTM D 882. The elongation and elasticity calculations were performed by employing data obtained from the associated stress-strain curve. The resulting values are contained in Table 3, below.

Table 3 – Results of Elongation and Elastic Modulus Determinations

Replicate ID	Elongation (%)	Average Elongation	Elastic Modulus (psi)	Average Elastic Modulus
A	480	440%	180	180 psi
B	430		150	
C	400		130	
D	430		200	
E	450		230	

Compressive Strength

The compressive strength of the material was determined in accordance with ASTM C 579, "Standard Test Method for Compressive Strength of Chemical-Resistant Mortars, Grouts, Monolithic Surfacings and Polymer Concretes." Cylindrical molds were poured from the liquid coating material (mixed according to the manufacturer's instructions). Because of the amount of material provided, only three replicate determinations were made instead of five. Testing was performed using a Tinius Olsen Universal Testing Machine. The results of the testing are contained in Table 4, below.

Table 4 – Results of Compressive Strength Determinations

Replicate ID	Compressive Strength (psi)	Average Compressive Strength
A	180	180 psi
B	150	
C	130	

Accelerated Weathering (QUV Exposure)

Five panels of each coating type were exposed to accelerated (using UVA 340 lamps) in accordance with ASTM G 154, "Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials," and ASTM D 4587, "Practice for Conducting Tests on Paint and Related Coatings and Materials Using a Fluorescent UV-Condensation Light- and Water-Exposure Apparatus." Exposure consisted to subjecting the coated panels to four hours of UV light at 60 °C, followed by four hours of condensing moisture at 50 °C for a total duration of 24 hours. Following the exposure period, the panels were removed from the apparatus, allowed to dry completely, and evaluated for tensile (pull-off) adhesion (described below).

Thermal Cycling

Resistance to thermal cycling was evaluated by subjecting one coated panel to six hours of oven exposure at 220°F followed by eighteen hours in a freezer at 10°F. The coating was then evaluated for tensile (pull-off) adhesion (described below).

Impact Resistance

The impact resistance of the coating material was evaluated in accordance with ASTM D 2794, "Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)." Weights were dropped from various distances in the forward impact direction onto one of the 4" x 6" coated panels. Due to the thickness of the steel panel to which the coating was applied, the impact resistance was evaluated by examining the location of impact for cracks or voids in the coating film only (ASTM D 2794 recommends a 0.025 gage steel substrate). Following impact, the panel was evaluated for tensile (pull-off) adhesion (described below).

Tensile (Pull-Off) Adhesion

Tensile adhesion testing was performed on the coating material to determine pull-off strength in accordance with ASTM D 4541, "Pull-Off Strength of Coatings Using Portable Adhesion Testers," Annex A.2, "Fixed Alignment Adhesion Tester Type II." The surface of each sample was gently cleaned using a cloth. Triplicate pre-abraded dollies were attached to the coating on each sample using two component, 100% solids epoxy adhesive (Araldite 2011). The adhesive was allowed to cure for 48 hours at 70 ± 2°F and 50 ± 5% RH. The dollies were then detached using a fixed alignment adhesion tester manufactured by Elcometer of Manchester, England, capable of applying a force of up to 1000 psi to the dolly. The force required to disbond each dolly (in psi) was recorded along with the location of break. The location of break is defined as adhesion (a distinct split between layers or between the substrate and the first layer), cohesion (a split within a single layer), or epoxy adhesive (coating adhesion/cohesion strength exceeds glue strength). The results of the adhesion testing can be found in Table 5, below.

Table 5 – Results of Tensile (Pull-Off) Adhesion Testing

Panel ID	Exposure	Dolly	Tensile Adhesion Strength (psi)	Location of Break	Average Tensile Adhesion Strength
1	Non-Exposed	A	170	100% adhesive failure of coating to steel	190 psi
		B	170	100% adhesive failure of coating to steel	
		C	230	100% adhesive failure of coating to steel	
2	Accelerated Weathering	A	100	100% adhesive failure of coating to steel	110 psi
		B	50	100% adhesive failure of coating to steel	
		C	170	100% adhesive failure of coating to steel	
3	Impact	A	330	100% adhesive failure of coating to steel	280 psi
		B	200	100% adhesive failure of coating to steel	
		C	300	100% adhesive failure of coating to steel	
4	Thermal Cycling	A	200	100% adhesive failure of coating to steel	330 psi
		B	370	100% adhesive failure of coating to steel	
		C	420	100% glue failure	

Shrinkage and Thermal Expansion

The coating material was evaluated for resistance to shrinkage and thermal expansion in accordance with ASTM C 531, "Test Method for Linear Shrinkage and Coefficient of Thermal Expansion of Chemical-Resistant Mortars, Grouts, Monolithic Surfacings, and Polymer Concretes." Two 6.0" x 1.0" molds of the liquid coating material were made. Replicate determinations were not performed due to the amount of liquid coating material provided. The sample was evaluated for shrinkage after fourteen (14) days at ambient laboratory conditions (25°C, 50% RH). No shrinkage of the sample was observed. The other mold was evaluated for thermal expansion by placing it in an oven maintained at 100°C for sixteen (16) hours. The sample was then evaluated for thermal expansion. None was observed.

Maximum Withstanding Temperature

The coating material was evaluated for the maximum withstanding temperature by employing ASTM E 1356, "Standard Test Method for Assignment of the Glass Transition Temperature by Differential Scanning Calorimetry." A differential scanning calorimeter (DSC) was used to determine the point of degradation of the free-film sample because no glass transition could be clearly identified. Testing revealed the maximum withstanding temperature to be 275°C.

If you have any questions or comments regarding this report, please contact me at 412-788-1300, extension 205.

Very truly yours,

KTA-TATOR, INC.

Carly M. Pravlik
Chemist

CMP/CLO/WDC:jas
JN250065
Jas05143

Polycoat 250065

Date	Hours	Cup #A(g)	Cup #A(grain)	Cup #B(g)	Cup #B(grain)	Cup #C(g)	Cup #C(grain)
04/08/05	0.0	292.62	4515.13	314.60	4854.28	313.02	4829.90
04/08/05	0.0	292.62	4515.13	314.60	4854.28	313.02	4829.90
04/12/05	95.0	292.87	4518.98	314.80	4857.36	313.27	4833.76
04/13/05	118.0	292.94	4520.06	314.85	4858.14	313.33	4834.68
04/14/05	148.0	293.01	4521.14	314.90	4858.91	313.40	4835.76
04/19/05	263.0	293.26	4525.00	315.09	4861.84	313.63	4839.31
04/21/05	318.0	293.51	4528.86	315.27	4864.62	313.84	4842.55
04/22/05	342.0	293.57	4529.79	315.32	4865.39	313.91	4843.63
04/25/05	411.0	293.76	4532.72	315.47	4867.70	314.09	4846.41
04/29/05	508.5	294.00	4536.42	315.66	4870.63	314.33	4850.11
05/12/05	821	294.88	4550.00	316.34	4881.13	315.16	4862.92

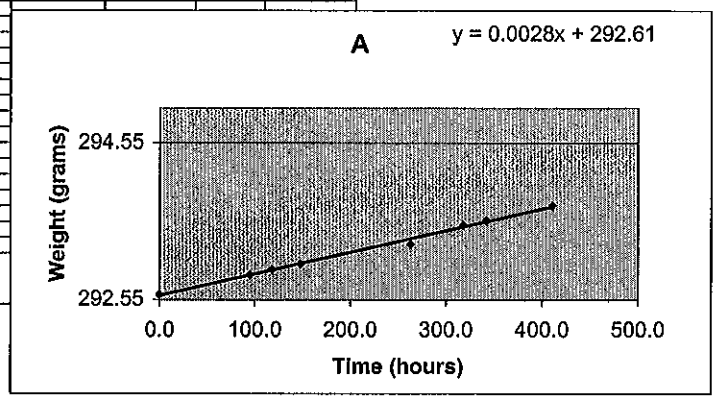
	A	B	C
Thickness(in)	0.1240	0.1240	0.1240
Radius (in)	1.9375	1.9375	1.9375
Radius (m)	0.0492	0.0492	0.0492
Area (sq.m)	0.0076	0.0076	0.0076
Slope (grams/hr)	0.0028	0.0021	0.0026
Area (sq.ft.)	0.0819	0.0819	0.0819
WVT(grams/24hr/sq.m)	8.832	6.624	8.201
Permeance(WVP metric perms)	0.002	0.002	0.002
Permeability (perm cm)	0.00	0.00	0.00
Slope (grains/hr)	0.0432	0.0324	0.0401
WVT(grains/hr/sq.ft.)	0.5275	0.3957	0.4899
Permeance (WVP)	0.00376	0.00282	0.00349
Permeability (perm in.)	0.00047	0.00035	0.00043

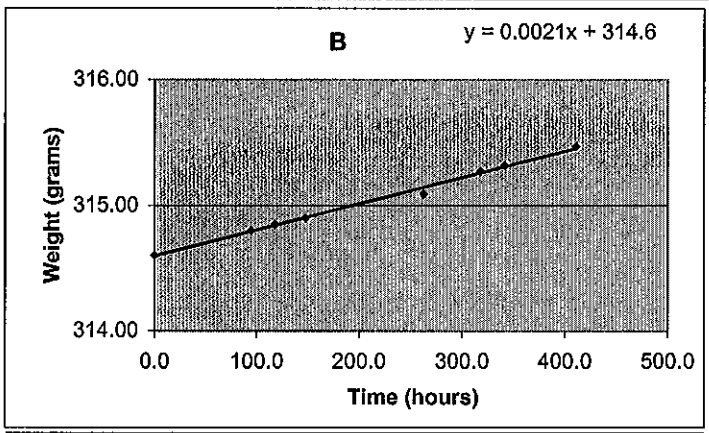
METRIC AVERAGES:

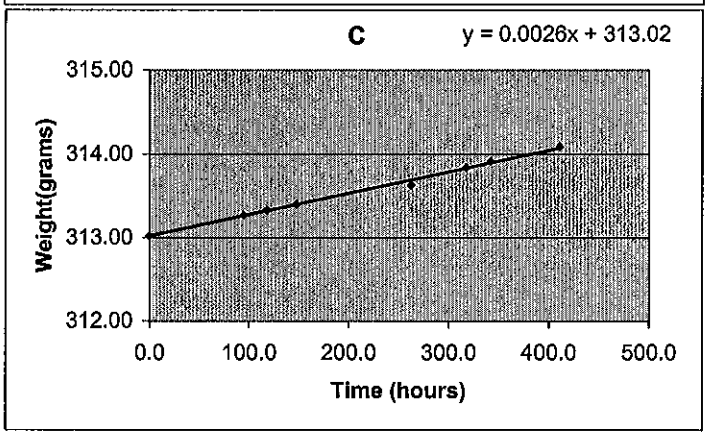
WVT (grams/24hr/sq.m)	7.88587
Permeance (metric perms)	0.00221
Permeability (perm cm)	0.00070

ENGLISH AVERAGES:

WVT(grains/hr/sq.ft)	0.47101
Permeance (English perms)	0.00335
Permeability (perm in.)	0.00042







Florida Department of
Environmental Protection

Bob Martinez Center
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Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

October 18, 2006

Certified Mail
Return Receipt Requested: 7005 0390 0002 1979 0420

Mr. Ashish Dhuldhoya
Polycoat Products
14722 Spring Avenue
Santa Fe, CA 90670-5108

RE: DEP Approval of the Polycoat Polyeuro 5502 coating, File No. EQ-651

Dear Mr. Dhuldhoya:

The Bureau of Petroleum Storage Systems has concluded its review of the Equipment Approval request dated September 7, 2006, that was submitted for the above referenced coatings pursuant to Rule 62-762.851, Florida Administrative Code (F.A.C.).

Based on the information provided by Polycoat Products, the Department finds that the applicant's Polycoat Polyeuro 5502 coating will provide environmental protection substantially equivalent to that provided by compliance with the requirements established in Rule 62-762.501(1)(e)3.b., F.A.C.

Pursuant to Rule 62-762.851, F.A.C., the request for the use of the above referenced product is approved in the State of Florida as a coating for concrete or steel secondary containment of aboveground storage tanks containing petroleum products. The Polycoat Polyeuro coating must be applied with a minimum of 40 mils thickness over steel or a minimum of 60 mils thickness over concrete areas and must be applied in accordance with the manufacturer's recommendations.

Please be advised that the above referenced DEP rules are subject to change. If the above rule standards are modified in the future, this Order may be modified or rescinded for future upgrades and installations. Additionally, if the product(s) shows a consistent pattern of failure(s), and therefore does not provide substantially equivalent environmental protection, the Department may rescind this Order.