POLYCOAT PRODUCTS
A Division of American Polymers Corp.

THEMECOAT® 758

Two Component Modified Polyurea Protective Coating

DESCRIPTION

Themecoat® 758 is a two component, 1:1, 100% solids, low pressure system, fast set, liquid applied, modified polyurea spray system for protecting EPS, foam, fiberglass, and wood surfaces. It has an excellent balance of physical properties to resist damage from high impact and low temperatures.

FEATURES

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

TYPICAL USES

- ❖ Architectural Shapes
- ❖ Mold Castings
- ❖ Encapsulation of Fiberglass Bodies
- ❖ Props
- ❖ Wood Parts

COLOR

Clear/Neutral or Tan. Custom colors are available upon request.

Due to its aromatic composition, Themecoat® 758 will tend to yellow or darken in color after exposure to UV light if not topcoated. Themecoat® 758 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

Themecoat® 758 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 - Dry	-20°F to 200°F
Service Temperature - Wet	40°F to 120°F

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

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

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.

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

Themecoat® 758 may not be diluted under any circumstances. Thoroughly mix Themecoat® 758 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.

Themecoat® 758 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

Themecoat® 758 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.