

TECHNICAL DATA SHEET

THEMECOAT® 758

Two Component Modified Polyurea Protective Coating

Product 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

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

TYPICAL USES

- Architectural Shapes
- · Encapsulation of Fiberglass Bodies
- · Mold Casting
- Props
- Wood Parts

PACKAGING

10-gallon kit: 5 gallon (18.9 liters) pail of Side-A and 5-gallon (18.9 liters) pail of Side-B.

100-gallon kit: 50 gallon (189 liters) drum of Side-A and 50-gallon (189 liters) drum of Side-B.

COLOR

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

Due to its aromatic composition, Themecoat® 757 will tend to yellow or darken in color and will become flat after exposure to UV light. Themecoat® 757 may be topcoated within twelve hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish.

Clear/Neutral orTan. Custom colors are available upon request.

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MIXING

Themecoat® 758 may not be diluted under any circum- stances. Thoroughly mixThemecoat® 758 Side-B with air driven power equipment until a homogeneous mixture and color is obtained.

COVERAGE

Themecoat® 758 may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sqft (3.78 liters per 149 sqm).

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

TECHNICAL DATA (Based on Draw Down Films)	
Mix Ratio	1A : 1B
Pot Life	12-16 seconds
Tack Free Time	40-60 seconds
Recoat Time	6-12 hours
Viscosity at 150-160°F (66.6-71°C), Brookfield: Side-A Side-B	400-500 cps 700-900 cps
Density (Side A & B Combined)	9.22 lbs/gal (1100 kg/m³)
Flash Point	>200°F (>93.3°C)
Hardness, ASTM D-2240*	91-93 Shore A
Tensile, ASTM 412-C*	$2000 \pm 300 \text{ psi}$ (13.8 ± 2.07 MPa)
Elongation, ASTM 412-C*	250% ± 50%
Tear, ASTM 624-C*	175-200 pli (32-35 kM/n)
Service Temperature - Dry	-20 to 250°F (-29 to 121°C)
Service Temperature - Wet	40 to120°F (4.4 to 49°C)

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.

FIBERGLASS REINFORCED PLASTIC:

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

woon.

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. Opti- mum surface profile is 2-3 mils (50-75 microns). 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.

APPLICATION

Both Side-A and Side-B materials should be preconditioned to 75-80°F (24-32°C) before application.

Recommended surface temperature must be at least 5°F (3°C) 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 x24 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.

DO NOT STORE OUTSIDE.

WARNING

This product contains isocyanates and curative material.

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