



**POLYCOAT
PRODUCTS**
A Division of American Polymers Corp.

THEMECOAT™ 3851
*Two Component Modified
Polyurea Protective Coating
Technical Data Sheet*

DESCRIPTION

Themecoat™ 3851 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

- ❖ Encapsulation of Fiberglass Bodies and Polystyrene Foams
- ❖ Decorations
- ❖ Architectural Shapes

COLOR

Neutral or Black. Custom colors are available upon request. Additional charges may apply.

PACKAGING

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

COVERAGE

Themecoat™ 3851 should be applied in thin passes to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft..

SURFACE PREPARATION

Remove all contaminant, oil and grease from substrate.

APPLICATION

Themecoat™ 3851 should be applied using a 1:1 plural component equipment capable of developing a minimum of 2000 psi (13.8 MPa) and heating the individual component to **170°F (77°C)** using an impingement gun.

Hose temperature should be maintained at **160-170°F (72-77°C)**. The Themecoat™ 3851 material should be preheated to **75-80°F (24-27°C)**.

Themecoat™ 3851 should be sprayed in multidirectional passes for a proper uniform thickness.

TECHNICAL DATA

Mix Ratio by Volume	1A : 1B
Pot Life	3-5 seconds
Tack Free Time	20-40 seconds
Recoat Time	0-12 hours
Viscosity at 150-160°F (66.5-71°C), Brookfield:	
Part-A	120 ± 50 cps
Part-B	200 ± 50 cps
Density (Side A & B Combined)	9.0 lbs/gal
Flash Point	>200°F
	>93.3°C
Hardness, ASTM D-2240	85 ± 5 A
Tensile Strength, ASTM 412-C	1500 ± 300 psi
	10.3 ± 1.4 MPa
Elongation, ASTM 412-C	200% ± 20%
Tear, ASTM 624-C	200 ± 40 pli
Service Temperature	-20°F to 250°F
	-29°C to 121°C

(Results based on lab drawn film)

STORAGE

Themecoat™ 3851 has a shelf life of six (6) months from date of manufacture in original, factory sealed containers.

Part-A and Part-B drums must be stored above 60°F (15°C).

Avoid 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.

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 a 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 with 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 licensed applicator 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.