



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

**THEMECOAT® 1752-FR**  
*Fire Retardant, Two Component  
Aromatic Hybrid  
Polyurethane Hard Coat  
Technical Data Sheet*

**DESCRIPTION**

Themecoat® 1752-FR is a fire retardant fast set, rapid curing, aromatic, two component, hybrid polyurea/polyurethane spray designed to be applied over EPS, wood and many other surfaces. It's excellent balance of stiffness and impact resistance provides excellent plastic "shell-like" protection for delicate foams and EPS. Themecoat® 1752-FR's chemical design allows fast "user-friendly" application with excellent flow and appearance.

**FEATURES**

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

**TYPICAL USES**

- ❖ EPS Hard Coat Surface Protection
- ❖ Decorations
- ❖ Architectural Shapes

**COLORS**

Neutral. Custom colors are available upon request.

**PACKAGING**

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

**COVERAGE**

Themecoat® 1752-FR 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.

**MIXING**

Themecoat® 1752-FR may not be diluted under any circumstances. Thoroughly mix Themecoat® 1752-FR Part-A and Part-B Base material with air driven power equipment until a homogeneous mixture and color is obtained.

**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**

Themecoat® 1752-FR has a shelf life of six (6) months from date of manufacture in factory sealed containers.

**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)	

**APPLICATION**

Themecoat® 1752-FR 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 impigment gun.

Both Themecoat® 1752-FR Side-A and Side-B materials should be continuously agitated before and during application. Agitate at least 1 hour prior to application using heavy duty drum agitator.

Hose temperature should be maintained at **160-170°F (72-77°C)**. The Themecoat® 1752-FR Side-A material must be preheated to **90-100°F (32-38°C)** and Side-B material preheated to **75-80°F (24-27°C)**.

Themecoat® 1752-FR should be sprayed in multidirectional passes for a proper uniform thickness.

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 Part-A and Part-B drums regularly.

Do not open until ready to use.

**WARNING**

This product contains Isocyanates and Curative Material.

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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.***

**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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