Product Description
Polyeuro® MH-754FR 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® MH-754FR’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
» Low Shrinkage
» 100% Solids
» Zero VOC
» Fast Cure
» High Productivity
» Meets USDA Criteria
» Excellent Thermal Stability
» Excellent Chemical Protection
» Excellent Cold Temperature Impact

TYPICAL USES
» Decorations / Props
» Architectural Shapes
» Steel Coating
» Food Processing Plants
» Speaker Boxes
» Dock Floatations
» Wood Pallets / Crates
» Wood Cabinets

PACKAGING
10-gallon kit 5 gallons (18.9 liters) Side-A (Isocyanate side) and 5 gallons (18.9 liters) Side-B (Resin side)
100-gallon kit 50 gallons (189 liters) Side-A (Isocyanate side) and 50 gallons (189 liters) Side-B (Resin side)

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® MH-754FR will tend to yellow or darken in color and will become flat after exposure to UV light. Polyeuro® MH-754FR may be topcoated within twelve hours of application with an aliphatic polyurethane/polyurea coating for a colorfast finish. Coverage Polyeuro® MH-754FR may be applied at any rate to achieve desired thickness. Theoretical coverage for 1 mil thickness is one gallon per 1600 sq. ft.

Coverage
Poyeuro™ MH-754FR 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 previously used substrates, it is important to consider the possibility of substrate absorption, which may affect the adhesion of the coating system, regardless of the surface preparation. Polycote recognizes the potential for unique substrates from one project to another. The following information is for general reference. For project-specific questions, contact Polycote.

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, Polycote 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
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 Cleaning per SSPC-SP10/NACE 2. Optimum surface profile is 3-4 mils. Prime and shoot Polyurea® onto any bare metal the same day as it is cleaned to minimize any potential flash rusting.

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. Contact Polycoat Products for recommended primer. 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.

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. Contact Polycoat Products for recommended primer.

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
Polyurea® MH-754FR may not be diluted under any circumstances. Thoroughly mix Polyurea® MH-754FR 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 be continuously 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.

Polyurea® MH-754FR 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.

Polyurea® MH-754FR should be sprayed in smooth, multidirectional passes to improve uniform thickness and appearance.

Storage
Polyurea® MH-754FR 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.