Specialized Industrial Materials, LLC

Technical Data Sheet Super Hybrid Polyurea

Aromatic Polyurea Hybrid Coating Revision 2. Date 010.2.2014

PRODUCT DESCRIPTION:

Super Hybrid Polyurea is the strongest, toughest coating known to the industry, having physical properties that are approximately triple those found in other high quality polyurea coatings. Super Hybrid Polyurea is a 1:1, fast-set, spray-applied hybrid polyurea elastomer that is 100% solids and VOC-free. It forms a very smooth, slick surface. Super Hybrid Polyurea is fairly hard and tough, but it retains excellent resiliency and is not brittle. Abrasion resistance and chemical resistance are excellent. Super Hybrid Polyurea most often finds application on primed steel or concrete.

Super Hybrid Polyurea requires a primer to adhere to metal or concrete surfaces. When applied to steel over GatorHyde MMP (Multi Metal Primer), Super Hybrid Polyurea affords a tremendous level of corrosion protection and bond strength in a thick-film plastic encasement. When applied to concrete over our Concrete Primer, Super Hybrid Polyurea forms a monolithic waterproof membrane that is tough and durable.

PRIMARY APPLICATIONS:

- Secondary Containment Lining for Geotextile Composite Membranes
- Wastewater Treatment Plants
- Primary Containment over Steel or Concrete
- Work Trailer Coating
- Off-Shore Platform Decks
- Institutional Floor Coating
- Inside Steel Salt-Water Knock Out Tanks
- Inside Steel Oil and Fuel Tanks
- Concrete Ocean Pilings
- Over Primed Steel and Concrete

AVAILABLE COLORS:

- Black most common
- Others on request, for interior application
- Note: Super Hybrid Polyurea is intended for exterior applications, but will not remain color fast in colors other than black when used outdoors.

APPLICATION EQUIPMENT:

Super Hybrid Polyurea must be applied utilizing a high pressure, heated plural component pump (1:1 by volume). **Super Hybrid Polyurea** should be applied at a constant pressure range between 2000 and 2500 psi and material temperature of 150° to 160°F. *For additional information on equipment and installation issues, contact Chemline Technical Service for details.*

APPLICATION RECOMMENDATIONS:

Super Hybrid Polyurea adheres extremely well to geotextile fabric and properly prepared concrete, metal, wood, aluminum, fiber glass, and galvanized metal surfaces. Prior to coating, make sure that all substrates are free of loose dust, dirt, rust, grease, oil, mold release agents or other contaminants that might interfere with the bonding process. Where excellent adhesion is required, it is recommended that surfaces be primed before applying Super Hybrid Polyurea. Contact Specialized Industrial Materials for recommended primer use.

PHYSICAL PROPERTIES:

Tensile Strength, psi	ASTM D412	5200
Elongation, %	ASTM D412	300
Die "C" Tear Strength, pli	ASTM D624	470
Hardness, Shore A	ASTM D2240	95
Hardness, Shore D	ASTM D2240	50
Flexibility, 1/8" mandrel	ASTM D1737	Pass
Taber Abrasion, mg loss CS17	ASTM D6040	4.7
Viscosity, A Side (75°F)	CPS	650
Viscosity, B Side (75°F)	CPS	850

TYPICAL PROCESSING PROPERTIES:

Gel Time	Seconds	8
Tack Free Time	Seconds	15

SAFETY & HANDLING:

This product is for industrial use only. Avoid contact with eyes and skin. When spraying, wear a respirator or fresh air hood. Spraying indoors requires forced ventilation. Be sure to read entire SDS prior to using any Specialized Industrial Materials product.

PACKAGING:

Super Hybrid Polyurea is available in 5 gallon pails, 55-gallon drums, and 275 gallon totes.

	Net Weight	Container Wt	Total Wt
A-side 5gal pails	45 lbs	2 lbs	47 lbs
A-side 55 gal drum	500 lbs	45 lbs	545 lbs
A-side 275 gal tote	2500 lbs	140 lbs	2640 lbs
B-side 5gal pails	43 lbs	2 lbs	44 lbs
B-side 55 gal drum	462 lbs	45 lbs	507 lbs
B-side 275 gal tote	2310 lbs	140 lbs	2450 lbs

SHELF LIFE & STORAGE:

Six months in factory delivered, unopened drums. Keep away from extreme heat, freezing, and moisture. Proper storage temperature is between 60°F and 90°F. This product can be shipped 12 months without special precaution for heated or refrigerated service, however, it is recommended to warm the material to minimum of 70°F before application.

SHIPPING INFORMATION:

Super Hybrid Polyurea can be shipped via most commercial truck lines. The shipping class is "55". The "A" and "B" sides are unregulated, and classified as Liquid Plastic, NOS.