



Environmentally Safe Polymers, Inc.

Technical Data

Updated 11/2004

POLYLINER #67 100% SOLIDS URETHANE COATING

PRODUCT DESCRIPTION AND USAGE:

PolyLiner #67 is a 100% solids, two component liquid urethane coating. Intended for use as a plural component, high build, spray applied coating for interior of tanks and other surfaces where it is desirable to maintain good sanitary conditions or contain materials to prevent contamination of the environment. Suitable substrates include steel, urethane and polystyrene foam, primed wood, concrete, masonry, geotextiles, ferrous and non-ferrous metals.

COLOR:

Black. Contact your E.S.P. Representative for other colors.

PHYSICAL PROPERTIES

WEATHERABILITY:

Excellent durability. Colors other than black will have limited exterior durability.

CHEMICAL RESISTANCE:

Good hydrolytic stability to 180°F. Good resistance to inorganic bases, acids and hydrocarbon solvents, fair resistance to oxygenated and chlorinated solvents.

TENSILE:

ASTM D-412
Strength: 2500 psi
Elongation: 100%
Permanent Set: 15% maximum

HARDNESS:

ASTM D-2240 Shore D 50 ± 5

TEAR RESISTANCE:

ASTM D-624 Die C 300 pli

ABRASION RESISTANCE:

ASTM D-4060
1000 gm load, H-18 wheel, 160 milligram weight loss per 1000 cycles.

COLD TEMPERATURE FLEXIBILITY:

ASTM D-3111 pass 1.0 inch mandrel at -40°F.

ADHESION:

ASTM D-903 25 Lbs./lineal inch, cohesive failure. Adheres well to polyurethane foam, wood, neoprene, Hypalon coatings, acrylic coatings and E.S.P. primers. Primer is required for masonry, concrete and metal. See primer recommendations below for these and other surfaces. PolyLiner #67 can be recoated when set to touch. Surfaces that cure hard (over 4 hours at 70°F) should be recoated with PolyPrime #06 or PolyPrime #07 Primer to insure good innercoat adhesion.

WATER ABSORPTION:

ASTM D-471
Max. 24 Hours R.T.: 1.5%

WATER VAPOR PERMEABILITY:

ASTM E-96 Procedure B
Max. 100% R.H. differences at 70°F. 0.03 perm In.

TOXICITY:

Isocyanate contains polymeric isocyanate. A fresh air supply respirator, protective clothing and other protective equipment is required for application.

LIQUID PROPERTIES

COVERAGE:

Sq.Ft./Gal.Mil 1600

SOLIDS:

Weight: 100%
Volume: 100%

A.P.C.:

Conforms to all Air Pollution Control regulations. Contains no Volatile Organic Compounds.

FLASH POINT:

ASTM D-56 (TCC) Above 200°F.

STORAGE STABILITY:

Poly Component: One year @ 50-80°F.
Iso Component: Six months @ 50-80°F.

THINNER:

Thinning is not recommended.

POLYLINER #67

VISCOSITY:

Poly Component: 1000 cps @ 77°F.
Iso Component: 1000 cps @ 77°F.

COMPRESSIVE STRENGTH:

3000-6000 psi

COATING DENSITY:

SP. GR. = 1.07 or 67 lbs./ft.

APPLICATION

PRIMER:

Geotextiles:
No primer necessary.

Expanded Polystyrene Insulation:
No primer necessary.

Polyurethane Foam Insulation:
No primer necessary.

Wood:
No primer necessary.

Concrete:
PolyPrime #01 or PolyPrime #07

Metals other than Copper:
PolyPrime #01 or PolyPrime #07

Copper:
PolyPrime #07

MIXING:

WARNING: PolyLiner #67 components cannot be crossed mixed with other urethane coating components. Stir polyol component to suspend any settled pigment.

POT LIFE:

10 to 15 seconds @ 70°F and 1 to 3 seconds @ 130°F.
Do not heat above 150°F.

APPLICATION:

Apply only with plural component airless equipment which meters and pumps the components separately to be mixed at the spray gun. Impingement mixing at the gun has been successful. Material temperature must be maintained above 100°F during application. Apply multiple coats at up to 30 wet mils per coat allowing material to set to touch before applying additional material. When application is to a surface with a temperature between 30°F and 50°F will set to touch in 3-10 minutes. Higher temperature reduces recoat time accordingly. Do not apply to surfaces below 30°F.

CURE:

Applied coating will set in 1-5 minutes at 70°F depending upon film thickness. Can be placed in service after 4 hours cure time at 70°F.

RECOAT:

Can be recoated when dry to the touch. Maximum recoat time is 4 hours. Prime with PolyPrime #07 if recoat interval exceeds 4 hours.

Our data is based on information from lab and field testing which we believe to be reliable and accurate. Environmentally Safe Polymers, Inc. makes no warranties, expressed or implied of the products use or its results, and assumes no obligation or liability in connection therewith.