



Environmentally Safe Polymers, Inc.

Technical Data

Updated 11/2004

POLYWALL #105 MULTI PURPOSE SPRAY ELASTOMER

PRODUCT DESCRIPTION AND USAGE:

PolyWall #105 is 100% solids, two component, fluid applied, polyurea urethane hybrid coating. PolyWall #105 is primarily used for lining the interior of tanks, silos, pipes and flumes in order to provide corrosion protection, chemical resistance and resistance to abrasion.

COLOR:

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

PHYSICAL PROPERTIES

CHEMICAL RESISTANCE:

Good resistance to inorganic bases, acids and hydrocarbon solvents. Fair resistance to oxygenated and chlorinated solvents. Good resistance to hot water up to 180°F.

TENSILE:

ASTM D-412	Strength:	2400 psi
	Elongation:	150%
	Permanent Set:	10% max.

HARDNESS:

ASTM D-2240	Shore A	90
	Shore D	40

TEAR RESISTANCE:

ASTM D-624	Die C	320 pli
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ABRASION RESISTANCE:

Excellent.

LIQUID PROPERTIES

SOLIDS:

Weight:	100%
Volume:	100%

VISCOSITY:

Poly Component:	400-550 cps @ 77°F.
Iso Component:	400-550 cps @ 77°F.

DENSITY:

Poly Component:	1.025
Iso Component:	1.14

V.O.C.:

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

FLASH POINT:

ASTM-D-56 (TCC)	Greater than 200°F.
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TOXICITY:

Iso component contains polymeric isocyanate requiring fresh air supply respirator, gloves, and protective clothing during application.

STORAGE STABILITY:

One year in unopened containers at 50-90°F.

APPLICATION

MIXING:

Thoroughly mix the colored component in order to re-suspend any pigment that may have settled out. Apply, using hot airless spray equipment capable of producing 1000 psi, and maintaining an application temperature of 120° to 130°F. The mixing ratio shall be maintained within 0.95 to 1.1 volume of isocyanate to 1 volume of polyol. Impingement mixing, air purge spray guns are suggested for ease of application. PolyWall #105 gels in 2-5 seconds and cures to handle in 10-30 seconds when applied using hot airless spray equipment. Allow 1 to 4 hours for complete cure before placing coated items into service. Other variations of PolyWall #105 include the same polymer system supplied with a mixing ratio of one volume isocyanate component to two of polyol. A harder version with a 50 Shore D hardness is also available. Other properties that can be enhanced include anti-static properties and low coefficient of friction to aid in unloading bulk material and enhance wear properties. Please contact your E.S.P. Representative for additional information.

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.