



Environmentally Safe Polymers, Inc.

Technical Data

Updated 11/2004

POLYDECK #53 BATCH MIX DECKING POLYMER

PRODUCT DESCRIPTION AND USAGE:

PolyDeck #53 is a 100% solids, two component, two to one by volume batch mix urethane hybrid polymer. PolyDeck #53 was specifically developed for application by a spray, brush or roll as a wearing and waterproofing membrane for concrete, pedestrian or vehicular decks.

COLOR:

Standard colors for PolyDeck #53 are black and dark gray. Custom colors are also available upon request.

PHYSICAL PROPERTIES

CHEMICAL RESISTANCE:

Good hydrolytic stability to 160°F. Excellent water resistance. Good resistance to acids and hydrocarbon solvents. Fair resistance to oxygenated solvents, chlorinated solvents and inorganic bases.

TENSILE:

ASTM D-412
Strength: 2250 psi
Elongation: 75%
Permanent Set: 2% maximum

HARDNESS:

ASTM D-2240
Shore D 55 ± 3

TEAR RESISTANCE:

ASTM D-624
Die C 200 pli

ABRASION RESISTANCE:

Excellent.

LIQUID PROPERTIES

SOLIDS:

Weight: 100% Volume: 100%

VISCOSITY:

Poly Component: Semi-fluid thixotropic liquid.
Iso Component: 75-100 cps @ 77°F.

DENSITY:

Poly Component 8.4-9.5 lbs/gal (S.G. 1.01-1.14)
Depending upon color.

Iso Component: 10.0 lbs/gal (S.G. 1.20)

V.O.C.:

Contains no Volatile Organic Compounds.

FLASH POINT:

ASTM D-56 (TCC) Greater than 200°F.

TOXICITY:

Iso component contains MDI isocyanate requiring fresh air supply respirator, gloves, and protective clothing for spray application. Good ventilation needed for brush or roller application.

STORAGE STABILITY:

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

APPLICATION

MIXING:

Best results are obtained by pouring the Iso into the mixing container first. Then mix two parts polyol to one part isocyanate component.

POT LIFE:

Pot life is 35 - 45 minutes for a 100 gram quantity when mixed at room temperature. A one gallon quantity has a pot life of 25 - 35 minutes. Pot life is reduced to one half at 90°F and will be extended at lower temperatures.

CURE TIME:

Tack free is 4 - 6 hours at 70°F and approximately 24 hours at 40°F. Allow 48 hours at 70°F before permitting light traffic.

EQUIPMENT:

Suitable spray equipment includes high pressure airless and air atomizing hopper guns. May also be applied by notched trowel, brush or medium nap rollers.

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.