Environmentally Safe Polymers, Inc.

Technical Data

Updated 11/2004

POLYROOF #75 COPPER
POLYUREA HYBRID ROOFING POLYMER

PRODUCT DESCRIPTION AND USAGE:
olyRoof #75 is a 100% solids, plural component, one to one by volume, polyurea-urethane hybrid coating. PolyRoof #75 was specifically developed for use as a spray applied protective coating for waterproofing metal and built-up roofs and for protection of polyurethane spray foam.

COLOR:
Red toned copper. NOTE: Copper color is dispersed in the isocyanate component.

PHYSICAL PROPERTIES

WEATHERABILITY:
Exposure equivalent to 5 years natural weathering per ASTM G-90 has been completed with no loss of physical properties. Color has faded slightly but has stabilized.

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:	1300 psi
Elongation:	200%
Permanent Set:	10% maximum

HARDNESS:
ASTM D-2240

Shore A:	70-75

TEAR RESISTANCE:
ASTM D-624

Die C	140 pli

ABRASION RESISTANCE:
Excellent.

LIQUID PROPERTIES

SOLIDS:

Weight:	100%
Volume:	100%

VISCOSITY:

Poly Component:	550 ± 75 cps @ 77°F.
Iso Component:	1500 ± 100 cps @ 77°F.

DENSITY:

Poly Component:	8.5-9.5 lbs./gal. (S.G. 1.03-1.14)
Iso Component:	9.25 lbs./gal. (S.G. 1.11)

V.O.C.:
Contains no Volatile Organic Compounds.

FLASH POINT:

ASTM D-56 (TCC)	Greater than 200°F.

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

STORAGE STABILITY:
One year in unopened containers @ 50-90°F.

APPLICATION

MIX RATIO:
1:1 by volume.

REACTIVITY:
Tack free time is 10-30 seconds when sprayed with heated plural component airless spray equipment.

CURE TIME:
Applied coating will set in 2-10 minutes at 70°F depending on film thickness and substrate temperature. Product can be placed into service after four hours of cure time at 70°F minimum.

EQUIPMENT:
Plural component spray equipment capable of maintaining temperature of 130-140°F and 2500 psi minimum pressure. Contact Environmentally Safe Polymers, Inc. for specific instructions and spray equipment needed.

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