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PRODUCT DATA SHEET
COROLON 3580 (3577)
CHEMICAL RESISTANT URETHANE COATING

DESCRIPTION: Corolon 3580 is a 100% solids, two component liquid hybrid urethane coating.

USAGE: It is intended for use as a plural component high build spray applied coating for interior of tanks, railroad hopper cars, buildings 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, light gray and cream.

PHYSICAL PROPERTIES

WEATHERABILITY: Black has excellent durability; colors other than black will have limited exterior durability.

CHEMICAL

RESISTANCE: Good hydrolytic stability to 180^o F. Good resistance to inorganic bases, acids and hydrocarbon solvents, fair resistance to oxygenated and chlorinated solvents.

TENSILE:	ASTM D-412	Strength:	3,500 psi
		Elongation:	50%
		Permanent Set:	5% Max.

HARDNESS:	ASTM D-2240	Shore D	60 +/-5
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TEAR RESISTANCE:	ASTM D-624	Die C	450 pli
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ABRASION RESISTANCE:	ASTM D-4060	1000 gm load, H-18 wheel 160 milligram weight loss per 1000 cycles.	
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COLD TEMPERATURE

FLEXIBILITY: ASTM D-3111 Pass 1.0 inch mandrel at 0° F.

ADHESION: ASTM D-903 25 Lbs./lineal inch, cohesive failure

Adheres well to polyurethane foam, wood, neoprene, Hypalon coatings, acrylic coatings and Corolon primers. Primer is required for masonry, concrete and metal. See primer recommendations below for these and other surfaces. Corolon- 3580 can be recoated when set to touch. Surfaces that cure hard (over 4 hours at 70° F) should be recoated with Corolon-#11, #12 or #1007 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. Difference at 70° F. 0.03 Perm Inches

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

LIQUID COMPONENT 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
(Tag Closed Cup) Above 200° F

STORAGE

STABILITY: Polyol: One year at 50-80° F
Isocyanate: Six months at 50-80° F

THINNER: Thinning is not recommended.

VISCOSITY:	Polyol component:	1000 cps @ 77° F
	Iso component:	700 cps @ 77° F
COMPRESSIVE STRENGTH:		3000-6000 psi
COATING DENSITY:		SP. GR. = 1.16 or 72 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:	Corolon-#11 primer
	Metals other than Copper:	Corolon-#11 primer
	Copper:	Corolon 1007 primer
MIXING:	Warning: Corolon-3580 components cannot be crossed mixed with other urethane coating components. Stir polyol component to suspend any settled pigment.	
POT LIFE:	8-10 seconds at 70° F and 1-3 seconds at 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 30 - 90 seconds 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 Corolon #1007 or #12 if recoat interval exceeds 4 hours.	

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