Industrial Polymers Corporation

InstaGel 40

Technical Data

Revision date: 10/14

DESCRIPTION	InstaGel 40 is a two component urethane elastomer that is specifically formulated as brush on molding compound. After mixing, InstaGel 40 thickens to a creamy butterable gel that can easily be brushed on to vertical or overhead surfaces without sagging or running. In 24-hours InstaGel 40 cures to a tough rubber mold and is ready for use. Some features of InstaGel 40 include, good grease and oil resistance, easy 1 to 1 mix by volume, good adhesion between coats and it is insensitive to inhibition. It is also tough, with high tear resistance, is color coded for mix indication and has long mold storage life.		
APPLICATION AND MIX RATIO	Component A and component B are supplied in 1 and 5 gallon plastic containers. Component B should be thoroughly mixed before using. Component A does not need mixing. Carefully measure out equal portions of component A and component B by volume in separate containers. Mix small batches by hand with a spatula. While mixing material carefully scrape down sides and bottom of container. Mixture gradually thickens over a 1 to 2 minute period to a creamy butterable consistency. Large batches should be avoided to insure even mixing. The ideal batch size is ½ gallon or less of total mix. It is important to mix correctly the exact amount of Part A to Part B to obtain maximum properties. Warmer temperature will decrease working life and cure time, whereas colder temperatures will increase the working life and cure time. InstaGel 30 can also be mix by weight: 100 parts of component A to 94 parts of component B by weight.		
WORKING PROPERTIES	Mix Ratio By weight		100 parts A/ 94 part B
	Mix Ratio By volume		100 parts A/ 100 parts B
	Viscosity @ 72°F (A Side)		2500 CPS
	Viscosity @ 72°F (B Side)		1100 CPS
	Viscosity @ 72°F (Mixed)		500,000 CPS
	Color	Part A:	Clear
	Color	Part B:	Light Blue
	Color	Mixed:	Light Blue
	Working Life @ 72°F		10-15 minutes
	Set Time* @ 72°F		24 hours
	* Set time and Demold time depends on temperature and relative humidity.		
PHYSICAL PROPERTIES	Specific Gravity: (Part A)		1.10
	Specific Gravity: (Part B)		1.04
	Specific Gravity: (Mixed)		1.08
	Weight/Gallon Part A		9.15 lbs.
	Weight/Gallon Part B		8.63 lbs.
	Weight/Gallon Mixed		8.89 lbs.
	Cubic inch per lb. of product		25.70
	Hardness @ 72° F	ASTM 2240-85	35-45 Shore A
	Tear Strength	ASTM D-624	244 lb./in.
	Tensile Strength	ASTM D-412 die C	1076 psi
	Elongation	ASTM D-412 die C	408%
	Modulus (100%)	ASTM D-412 die C	358 psi
	Modulus (200%)	ASTM D-412 die C	576 psi
	Modulus (300%)	ASTM D-412 die C	822 psi
CLEAN UP	Dispose of all empty InstaGel 40 component containers in accordance with local, state and federal regulations. Empty component containers can be rendered non-hazardous by rinsing the containers with a small amount of mixed material and allowing material to cure for 24 hours. The containers will then contain non-hazardous cured urethane.		
STORAGE AND SHELF LIFE	InstaGel 40 is shipped from the factory in sealed containers. The containers should be stored in a cool, dry area that is protected from direct sunlight and moisture. Storage temperatures should not exceed 80°F. The shelf life of the factory sealed containers stored under these conditions is six months. Containers that have been opened should be resealed immediately after material has been removed in order to prevent solvent evaporation.		
SHIPPING CLASS	Class 55 Non-hazardous		