

Urethane 1006 Black

TWO-COMPONENT, ROOM TEMPERATURE CURE

TECHNICAL DATA

Product Description

Urethane 1006 Black is a room temperature curing two part system designed to be used to encapsulate small to medium size electronic packages. This one to one mix ratio product has been formulated so as to provide low stress protection to the electronic package when exposed to multiple thermal shocks and high vibration. Once encapsulated with the Urethane 1006 Black, an electronic package will exhibit a higher resistance to both physical shock as well as exposure to water and other potentially harmful chemicals.

APPLICATIONS	FEATURES	RECOMMENDED SUBSTRATES
Electronic encapsulation	Two part adhesive	
	 One to one mix ratio Thermal and physical shock resistant Moisture and chemically resistant 	

UNCURED PROPERTIES*					
Property	Value	Test Method			
Solvent Content	No Nonreactive Solvents	N/A			
Chemical Class, PT A:B	Aliphatic Isocyanate : Polyol	N/A			
Appearance, PT A:B	Clear : Black	N/A			
Soluble in	Organic Solvents	N/A			
Viscosity, cps @ 25C, PT A	10,000-14,000	TFTEST001			
Viscosity, cps @ 25C, PT B	2,000-3,000	TFTEST001			
Mixed Viscosity, cps @ 25C	8,000	TFTEST001			
Specific Gravity, PT A:B	1.00 : 0.93	N/A			
Mix Ratio by Weight, PT A:B	100:93 *	N/A			
Mix Ratio by Volume, PT A:B	1:1	N/A			

*Acceptable mix-ratio range by weight: 100:93 +/-2

CURED MECHANICAL PROPERTIES*					
Property	Value	Test Method			
Durometer Hardness, Shore A	82	TFTEST012			
Operating Temperature Range, C	-50 to 110	N/A			
Moisture Resistance	Excellent	N/A			
Tensile Strength, psi	>1,000	TFTEST005			
Tensile Lap Shear, AL/AL, psi	1,200	TFTEST005			
Shrinkage, %	<2	N/A			
Dielectric Strength, Volts/mil	>400	N/A			

CURE OVERVIEW*				
Property	Value	Test Method		
Work life @ 25C, min	20	N/A		
Cure Time @ Room Temperature, hr	24	N/A		
Cure Time @ 65C, min	45-60	N/A		

Storage:

Store material in cool, dry location at a temperature between 10°C to 28°C. Keep from freezing. Material is sensitive to moisture. Refer to packaging specific quote for shelf life information. Consult MSDS for safe handling recommendations.

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