

## Aptek 2503-A/B Low modulus urethane conformal coating

Category : Polymer , Adhesive , Thermoset , Polyurethane, TS , Thermoset Polyurethane, Adhesive

### Material Notes:

APTEK 2503-A/B is an unfilled, two component, electrically insulating, transparent, flexible urethane coating system designed for the encapsulation and protection of electronic services mounted on printed circuit boards. For coating applications that require toughness, this system provides a combination of excellent flexibility and optimum tensile strength/elongation characteristics Qualified to Mil-I-46058C and SCD 6528981; Non-TDI based for safety; Excellent reversion resistance for good physical stability under high heat and humidity environments; Tg below -70°C for excellent low temperature cycling, storage and performance; Excellent substrate adhesion, no primer needed, superior to silicones; Exceeds NASA outgassing requirements for high vacuum environments; Fluoresces under black-light (UV) to facilitate QC inspection of coating coverage; Low viscosity and long work life for spraying or dipping operations Information provided by Aptek Laboratories, Inc.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Aptek-2503-AB-Low-modulus-urethane-conformal-coating.php](http://www.lookpolymers.com/polymer_Aptek-2503-AB-Low-modulus-urethane-conformal-coating.php)

Physical Properties	Metric	English	Comments
Density	0.900 g/cc	0.0325 lb/in <sup>3</sup>	A Component; ASTM D1475
	0.960 g/cc	0.0347 lb/in <sup>3</sup>	B Component; ASTM D1475
Viscosity	30 cP	30 cP	A Component; ASTM D1824
	30 cP	30 cP	B Component; ASTM D1824
Outgassing - Total Mass Loss	0.84 %	0.84 %	Cured property; at 10E-6 torr; ASTM E595
Collected Volatile Condensable Material	0.030 %	0.030 %	Cured property; at 10E-6 torr; ASTM E595

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	88	88	Cured property; ASTM D2240
Tensile Strength, Ultimate	19.3 MPa	2800 psi	Cured property; ASTM D412
Elongation at Break	475 %	475 %	Cured property; ASTM D412

Thermal Properties	Metric	English	Comments
CTE, linear	180 µm/m-°C	100 µin/in-°F	Cured property; ASTM E831-86
	@Temperature 20.0 °C	@Temperature 68.0 °F	
Glass Transition Temp, Tg	-74.0 °C	-101 °F	Cured property; ASTM E831-86
Flash Point	7.00 °C	44.6 °F	A Component; ASTM D92
	7.00 °C	44.6 °F	B Component; ASTM D92

Thermal Properties	Metric	English	Comments
Optical Properties	Metric	English	Comments
Transmission, Visible	90 %	90 %	transparent; thickness not quantified

Electrical Properties	Metric	English	Comments
Volume Resistivity	$\geq 1.00\text{e}+15$ ohm-cm	$\geq 1.00\text{e}+15$ ohm-cm	Cured property; ASTM D257
Insulation Resistance	$3.20\text{e}+12$ ohm	$3.20\text{e}+12$ ohm	Cured property; MIL-I-46058C
Dielectric Constant	3.2	3.2	Cured property; ASTM D150
	@Frequency 1000 Hz	@Frequency 1000 Hz	
Dielectric Strength	$\geq 59.1$ kV/mm	$\geq 1500$ kV/in	Cured; ASTM D149
	@Thickness 0.0762 mm	@Thickness 0.00300 in	
Dissipation Factor	0.025	0.025	Cured property; ASTM D150
	@Frequency 1000 Hz	@Frequency 1000 Hz	

Processing Properties	Metric	English	Comments
Processing Temperature	85.0 °C	185 °F	Cure 6 hrs
	100 °C	212 °F	Cure 3 hrs
	120 °C	248 °F	Cure 1.5 hrs

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China