

CONATHANE® EN-2552

Polyurethane

Cytec Industries Inc.

Message:

CONATHANE EN-2552 is a filled two-component urethane system designed for use as a potting and encapsulating material for electronic components where critical thermal cycling characteristics are a factor. CONATHANE EN-2552 has excellent electrical properties, low shrinkage, low stress buildup, and can be hand-mixed or machine dispensed.

General Information		
UL YellowCard	E69804-249043	
Features	Good Electrical Properties	
	Good Processability	
	Good Thermal Shock Resistance	
	Low Shrinkage	
Uses	Electrical Parts	
	Electrical/Electronic Applications	
Appearance	Black	
	Blue	
Forms	Liquid	
Processing Method	Encapsulating	
	Potting	
Physical	Nominal Value	Unit
Specific Gravity		
-- 1	1.24	g/cm ³
-- 2	1.46	g/cm ³
-- 3	1.48	g/cm ³
Water Absorption		
24 hour immersion : 25°C	0.060	%
7 day immersion : 25°C	0.15	%
Gel Time - 100 gm mass (25°C)	12.0 to 15.0	min
Cure Schedule		
25°C	7.0	day
80°C	0.7	day
Lap Shear - Adhesion to Aluminum	2.07	MPa
Linear Shrinkage	0.75	%
Hardness	Nominal Value	Unit
Durometer Hardness (Shore D)	90	

Mechanical	Nominal Value	Unit	
Tensile Strength	7.07	MPa	
Tensile Elongation (Break)	39	%	
Elastomers	Nominal Value	Unit	
Tear Strength	27.0	kN/m	
Thermal	Nominal Value	Unit	
CLTE - Flow	1.2E-4	cm/cm/°C	
Thermal Conductivity	0.65	W/m/K	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity ⁴	2.8E+17	ohms	
Volume Resistivity (25°C)	6.8E+13	ohms·cm	
Dielectric Strength	23	kV/mm	
Dielectric Constant (25°C, 1 kHz)	3.99		
Dissipation Factor			
25°C, 100 Hz	0.18		
25°C, 1 kHz	0.053		
Arc Resistance	> 120	sec	
Insulation Resistance (25°C)	8.6E+12	ohms	
Flammability	Nominal Value	Unit	Test Method
Flame Rating (6.35 mm)	V-0		UL 94
Thermoset	Nominal Value	Unit	
Thermoset Components			
Hardener	Mix Ratio by Weight: 100		
Resin	Mix Ratio by Weight: 17		
Thermoset Mix Viscosity			
25°C ⁵	4500	cP	
25°C ⁶	8500	cP	
25°C ⁷	300	cP	
NOTE			
1.	Resin		
2.	Mixed		
3.	Hardener		
4.	25°C		
5.	Mixed		
6.	Hardener		
7.	Resin		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

