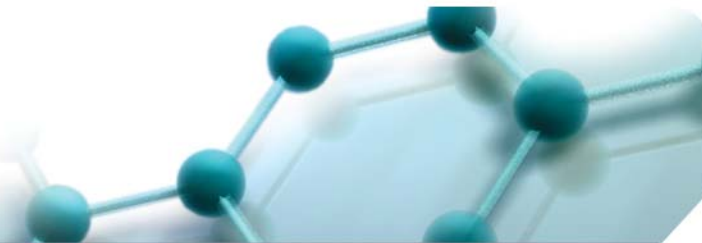


CONATHANE[®] EN-3010

TECHNICAL PRODUCT BRIEF



DESCRIPTION

CONATHANE EN-3010 is a filled, two-component polyurethane system formulated for surface mount technology (SMT) applications. CONATHANE EN-3010 has been tested by Underwriters Laboratories to be RoHS compliant and recognized to UL 94V-0.



CHARACTERISTICS AND PROPERTIES

Table 1 | Product Description

Property	Prepolymer PART A	Curative PART B
Viscosity @ 25°C (77°F)	3000 cps	18,000 cps
Specific Gravity @ 25°C (77°F)	1.30	1.60
Color	Amber	Black

Mix well to re-disperse any settled filler.

Table 2 | Processing Parameters

Property	Value
Mix ratio by Weight, Prepolymer/Curative	40 / 100
Mix ratio by Volume, Prepolymer/Curative	50 / 100
Initial mixed viscosity @ 25°C (77°F), cps	5000
Work life @ 25°C (77°F), minutes	20-30
Full Cure @ 25°C (77°F), for maximum properties, days	7
Alternate Cure @ 80°C (176°F), hours	16

Table 3 | Cured Properties

Property	Value
Color	Black
Hardness, Shore A	70
Tensile Strength, psi	1055
100% Modulus, psi	840
Elongation, %	166
Linear Shrinkage, in/in.	0.13
Tear Strength, pli	113
Flammability, UL Recognized, 6.3 mm	94V-0
Thermal Conductivity, W/mK	0.4106

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Table 4 | Electrical Properties

Property	Value @ 25°C (77°F)
Dielectric Constant @ 100 Hz	6.83
@ 1KHz	6.29
@ 1 MHz	4.35
Dissipation Factor @ 100 Hz	0.048
@ 1 KHz	0.064
@ 1 MHz	0.077
Volume Resistivity, ohm-cm	1.5×10^{14}
Surface Resistivity, ohms	6.2×10^{15}
Dielectric Strength, vpm	685

HANDLING AND STORAGE INSTRUCTIONS

CONATHANE EN-3010 has a shelf life of 18 months from date of manufacture when stored in the original unopened containers at 20°C-30°C (68°F-86°F). Containers should be flushed with dry nitrogen or CONAP[®] Dri-Purge each time they are opened unless the contents are used within one day.

CAUTION: Responsible handling of Cytec Industries Inc. products requires a thorough review of safety, health, and environmental issues prior to use. Review the Material Safety Data Sheets(s) for the specific Cytec Industries Inc. product(s) and container label information before opening containers. Ensure that employee exposure issues are understood, communicated to all workers, and controls are in place to prevent exposures above Permissible Exposure Limits (PELs). Review safety and environmental issues to be certain controls are in place to prevent injury to employees, the community, or the environment, and ensure compliance with all applicable Federal, State, and Local laws and regulations. For assistance in this review process, please call your Cytec Industries Inc. representative or our office noted below.

CONTACT INFORMATION

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DISCLAIMER: The data and information provided in this document have been obtained from carefully controlled samples and are considered to be representative of the product described. Because the properties of this product can be significantly affected by the fabrication and testing techniques employed and since Cytec Engineered Materials (CEM) does not control the conditions under which its products are tested and used, CEM cannot guarantee that the properties provided will be obtained with other processes and equipment. CEM has the right to change any data or information when deemed appropriate.

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