



Technical Data Sheet

POLYMARK A330

TWO-COMPONENT POLYURETHANE THERMALLY CONDUCTIVE ADHESIVE

Product Description:

Polymark A330 is a two-component, 100% solids, room temperature curing, thermally conductive adhesive system. It is designed to cure completely at room temperature. Polymark A330 provides excellent thermal conductivity while having very good adhesion to various metals, plastics, and other common assembly surfaces. It remains flexible at temperatures as low as -70°C and has excellent moisture resistance.

Polymark A330 resin and hardener are self flowing materials, but when mixed, immediately body to a thixotropic paste. The material will then remain non-sagging until it cures to a rubber-like hardness. This makes it ideal for securing components and heat removal in isolated areas.

Product Handling Properties (typical):

<u>CHARACTERISTIC</u>	<u>VALUE</u>
PART A (Hardener):	
Density (lbs./gallon)	9.57
Viscosity (centipoise)	425
Color	Tan
PART B (Resin):	
Density (lbs./gallon)	13.50
Viscosity (centipoise)	140,000
Color	Black
MIXED:	
Mix ratio (parts of A to B):	
by weight:	7 to 100
by volume:	1 to 10
Viscosity:	Paste
Gel Time (at 25°C, 10 grams)	25 minutes
Typical Cure Time 25°C	24 hours

Cured Physical Properties (typical):

<u>CHARATERISTIC</u>	<u>VALUE</u>
Color	Black
Cured Hardness (Shore)	A-80
Water Absorption	0.01%
Elongation	100%
Dielectric Constant (1MHz)	4.4
Dissipation Factor (1MHz)	0.0448
Max. Operating Temperature	130°C
Thermal Conductivity	0.9 W/mK

The cured physical properties were developed using a cure schedule of 72 hours at 25°C. The choice of the user's cure schedule will depend on the application and the user must determine suitability.

Polymark A330 can be proportioned by weight or volume. These ratios are stoichiometrically calculated and should be closely followed. Automated meter-mix dispensing equipment may be used for high volume production. (A list of dispensing equipment manufacturers is available from Polymark.)

A330 hardener is moisture sensitive and must be kept away from atmospheric moisture during storage. After opening a sealed container, thoroughly purge the remaining air space with dry nitrogen (or equivalent inert gas) before closing the container.

Handling Safeguards

Closely follow instructions on the labels of Polymark materials containing information on the hazards associated with each particular product. Most polyurethane resin systems are skin and eye irritants and can cause respiratory sensitization. Other problems, such as skin sensitization and more serious health hazards may exist. Consult the Material Safety Data Sheet for further information.

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Important Notice to Users: Typical properties are shown in this technical bulletin and should not be used or taken as specifications. Contact Polymark prior to establishing specifications. The information given for product description, handling properties and cured physical properties are offered solely to assist the purchaser's own testing. Polymark, its sales agents and distributors make NO WARRANTY OF MERCHANTABILITY OF THE PRODUCT OR THE FITNESS OF THE PRODUCT FOR ANY PARTICULAR PURPOSE. This product and all information supplied in connection with it is used at the purchaser's own risk, conditions of use being beyond Polymark's knowledge or control. The purchaser assumes all risk of use or handling of the product, whether in accordance with directions or not.