



TECHNICAL DATA SHEET

POLYMARK P240

POLYURETHANE POTTING SYSTEM

Features:

- **Extreme Hydrophobicity**
- **Flexible to -75°C**

Product Description:

Polymark P240 is a two component, room temperature curing polyurethane potting system. It is designed for the encapsulation of electronic devices. Polymark P240 provides excellent environmental protection while having good adhesion to various metals, plastics and other common assembly materials.

It is non-abrasive to dispensing equipment and well suited to automated operations. P240 is a DOT non-hazardous material and contains no TDI, MOCA, or other reportable substances.

Typical Product Handling Properties:

<u>CHARACTERISTIC</u>	<u>VALUE</u>
Part A:	
Color	Light Brown
Density (gram/cc)	1.22
Viscosity, 25°C	90 cps.
Part B:	
Color	Black
Density (grams/cc)	0.91
Viscosity, 25°C	3,500 cps.
Mixed:	
Mix Ratio (Part A to B):	
by weight	13.45 to 100
by volume	1 to 10
Mixed Viscosity, 25°C	2,500 cps.
Gel time, 25°C	15-20 min.
Handling Strength	0.75 – 1 hour
Time to Full Cure, 25°C	72 hours

Typical Cured Physical Properties

<u>CHARACTERISTIC</u>	<u>VALUE</u>
Cured Density (gram/cc)	0.94
Cured Hardness @25°C	A 40-50
Water Absorption	
24 hrs @25°C	< 0.2%
Dielectric Strength	
(volts/mil)	>400
Glass Transition Temp.	-80°C
Useful Operating Range	-75°C to 125°C

The cured physical properties were developed using a cure schedule of 96 hours at 25°C. The choice of the user's cure schedule will depend on the application and the user must determine suitability.

Polymark P240 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.)

P240 part A 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. When hand mixing P240, avoid any paper, wooden or other moisture laden utensils which could react with the product and produce unwanted bubbles or foaming. De-airing in a vacuum chamber is recommended after hand mixing.

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.