



TECHNICAL BULLETIN

POLYMARK P316-1

TWO-COMPONENT SILICONE POTTING SYSTEM

Features:

- Excellent Clarity
- High Temperature Service
- Non-yellowing
- Low Cost
- Low Stress

Product Description:

Polymark P316-1 is a clear, two-component, room temperature curing, silicone encapsulant system. Polymark P316-1 provides excellent environmental protection for electronics while having good adhesion to various metals, plastics and other common assembly materials. It's low durometer provides low stress for delicate and fragile components.

Typical Product Handling Properties:

<u>CHARACTERISTIC</u>	<u>VALUE</u>
Part A:	
Color	Colorless
Density (gram/cc)	0.97
Viscosity, 25°C	1,000 cps.
Part B:	
Color	Colorless
Density (grams/cc)	0.97
Viscosity, 25°C	1,000 cps.
Mixed:	
Mix Ratio (Part A to B):	
by weight	1 to 1
by volume	1 to 1
Gel time, 25°C	1 hour
Time to Full Cure, 25°C	24 hours

Typical Cured Physical Properties

<u>CHARACTERISTIC</u>	<u>VALUE</u>
Cured Density (gram/cc)	0.97
Cured Shore 00 Hardness	00-50
Refractive Index	1.41
Thermal Conductivity	0.15 W/m*K
Linear CTE	330 ppm
Useful Temp. Range	-40°C to 200°C
Dielectric Constant	2.90
Dielectric Strength (V/mil)	>400

The cured physical properties were developed using a cure schedule of 24 hours at 25°C, 10 mm thickness. The choice of the user's cure schedule will depend on the application and the user must determine suitability.

Polymark P316-1 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.

Shelf Life:

The shelf life of P316-1 Part A and B is 6 months from the date of manufacture when stored at temperatures between 60°F and 90°F in the original, unopened container. Always rotate on a first in, first out basis.

Handling Safeguards

Closely follow instructions on the labels of Polymark materials containing information on the hazards associated with each particular product. Most resin systems can be skin and eye irritants. 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.