

## P201

### TWO COMPONENT POLYURETHANE GEL POTTING

#### Product Description:

Polymark P201 is a black, two component, room temperature curing polyurethane potting gel. It is designed to cure completely at room temperature. Polymark P201 provides excellent environmental protection while having tenacious adhesion to various metals, plastics, FR4 and other common assembly materials. It has a very low moisture vapor transmission rate (MVTR) protecting encapsulated electronic devices.

Polymark P201 is an unfilled system that has a very high degree of flexibility. It provides excellent moisture resistance while providing low stress to critical areas such as solder joints. P201 is rated for continuous use at 130°C. With its high degree of tack, P201 provides excellent adhesion to most surfaces. Fully cured P201 will feel slightly tacky to the touch.

#### Typical Product Handling Properties:

<u>CHARACTERISTIC</u>	<u>VALUE</u>
<b>RESIN:</b>	
Color	Black
Density (grams/cc)	0.91
Viscosity, 25°C (centipoise)	3,750
<b>HARDENER:</b>	
Color	Light Amber
Density (gram/cc)	0.99
Viscosity, 25°C (centipoise)	75
<b>MIXED:</b>	
<b>Mix Ratio (Part A to B):</b>	
by weight	55 to 100
by volume	1 to 2
Viscosity, 25°C (centipoise)	1,400
Geltime @25°C	25 minutes
Time to full cure	48 hrs at 25°C

#### Cured Physical Properties

<u>CHARACTERISTIC</u>	<u>VALUE</u>
Cured Density (gram/cc)	0.94
Cured Hardness (Shore 00)	50
Water Absorption (24 hrs)	0.29%
Dielectric Constant	3.6
Weight loss @130°C (168 hours)	0.56%
Tensile Elongation	>250%
Tensile Strength, psi	50
Expansion Coefficient (ppm)	300

#### Features:

- **Soft, Gel-like Hardness**
- **Low Viscosity**
- **Excellent Moisture Resistance**
- **Good Clarity**
- **High Tack Adhesion**

Polymark P201 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.

P201 part A is sensitive to moisture and must be kept airtight during storage. After opening a sealed container, thoroughly purge the remaining air space with dry nitrogen (or equivalent inert gas) before closing the container. Store in cool, clean and dry areas. Usable shelf life may vary depending on method of application and storage temperature.

#### 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.

Rev. 8/14

**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.