



## Technical Data Sheet

### POLYMARK A111.9B One-Component Epoxy Adhesive/Sealant

#### Product Description:

Polymark A111.9B is a one component, heat curing epoxy adhesive/sealant. It is designed to give very fast cures at elevated temperatures. Polymark A111.9B has excellent adhesive properties to a wide variety of materials making it an excellent choice for bonding and sealing various metals, plastics and other common assembly materials.

Polymark A111.9B is highly reactive at elevated temperatures yet very stable at room temperature. It is a good choice for use in applications with very high production rates because of its ease of application and very fast rate of cure.

Polymark A111.9B has good resistance to moisture and excellent resistance to many chemicals. It is thixotropic at room temperature, but has high flow at elevated curing temperatures. Polymark A111.9B is non-abrasive to most dispensing equipment.

#### Typical Product Handling Properties:

<u>CHARACTERISTIC</u>	<u>VALUE</u>
Color	Black
Density (gram/cc)	1.34
Viscosity @25°C (10rpm)	12,500 cps
Thixotropic Index	2.5
Solids Content	100%
Shelf Life	
4°C	6 months
25°C	2 months
*Oven Cure Time (0.5 gram)	
125°C	30 minutes
180°C	5 minutes
*Hot Plate Cure Time (0.5 gram)	
125°C	20 minutes
150°C	<1 minute

\*Observed cure times are highly dependant on many factors including heating source and part assembly.

#### Typical Cured Physical Properties

<u>CHARACTERISTIC</u>	<u>VALUE</u>
Cured Hardness (Shore D)	85
Oil Resistance	Excellent
Moisture Absorption (24hrs)	<0.10%
Glass Transition	80°C
Lap Shear Strength (steel)	1,400 psi

The above cured physical properties were developed using a cure schedule of one hour at 125°C. The choice of the user's cure schedule will depend on the application and the user must determine suitability. The maximum amount of adhesive in an isolated area should not exceed 25 grams at 100°C, 5 grams at 150°C. If a thin bond line is used, exothermic concerns are minimized. Contact Polymark for further information.

#### Shelf Life:

Polymark A111.9B has a shelf life of 6 months when stored in sealed containers at 4°C, 2 months at 25°C. Beyond these times, a change in viscosity could render the material unusable for the specific application.

All A111.9B containers are labeled with the date of manufacture. Customers should use this date to insure their inventory is used on a first in, first out basis.

Care should be taken to avoid storage of A111.9B in warm areas such as non-ventilated exterior structures, near ovens or near other heat sources. Elevated temperatures shorten A111.9B's shelf life.

#### Handling Safeguards:

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