



## Technical Data Sheet

### POLYMARK E112.3 Two-Component Conductive Epoxy System

#### Features:

- **Long Stencil/Screen Life**
- **Ambient Storage**
- **Fast Oven Cure**

#### Product Description:

Polymark E112.3 is a two-component, heat curing, conductive epoxy adhesive. It is designed to give very fast cures at elevated temperatures. Polymark E112.3 has excellent adhesive properties to various electronic components having surfaces such as tin, silver, copper, gold, ceramic, and other common surfaces.

Polymark E112.3 is highly reactive at elevated temperatures yet has a long working life at room temperature. It is ideal for use in applications such as screen-printing and hand assembly work where a long open time is required.

#### Typical Product Handling Properties:

<u>CHARACTERISTIC</u>	<u>VALUE</u>
<b>Part A:</b>	
Color	Silver
Density	2.77 g/cc
Viscosity @25 C	125,000 cps
Thixotropic Index	5.0
Solids Content	100%
<b>Part B:</b>	
Color	Gray
Density	3.92 g/cc
Viscosity @25°C	150,000 cps
Thixotropic Index	5.0
Solids Content	100%
<b>Mixing Ratio (A to B):</b>	
By Weight	1 : 1
By Volume	1.42 : 1
<b>Suggested Minimum Cure*:</b>	
@120°C	4 – 5 minutes

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

**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.

#### Typical Cured Physical Properties

<u>CHARATERISTIC</u>	<u>VALUE</u>
Cured Hardness (Shore D)	80
Density	3.35 g/cc
Glass Transition	>100°C
Volume Resistivity (Ohm-cm)	1.5 x 10 <sup>-4</sup>

The above cured physical properties were developed using a cure schedule of 30 minutes at 130°C. The choice of the user's cure schedule will depend on the application and the user must determine suitability. Contact Polymark for further information.

#### Shelf Life:

Polymark E112.3 has a shelf life of 6 months when stored in sealed containers at 25°C. Before using the adhesive, each component should be mixed separately, prior to mixing together, since some settling of the product may occur.

All E112.3 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.

#### 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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