



Technical Data Sheet

POLYMARK C424

TWO-COMPONENT THERMALLY CONDUCTIVE SILICONE

Product Description:

Polymark C424 is a two-component, room temperature curing, thermally conductive elastomer system. It is designed to cure completely at room temperature.

Polymark C424 provides very good thermal conductivity while imparting low stress on sensitive electronic components.

Polymark C424 will cure at room temperature or can be accelerated with moderate heat. The cured material is elastic and tack free.

Cured Physical Properties (typical):

<u>CHARACTERISTIC</u>	<u>VALUE</u>
Color	Gray
Cured Hardness (Shore)	A30-50
Density (g/cc)	1.7
Continuous Use Temp.	-50°C 150°C
Dielectric Strength	>500 V/mil
Thermal Conductivity	1.0 W/mK

The cured physical properties were developed using a cure schedule of 24 hours at 25°C plus 2 hours at 70°C. The choice of the user's cure schedule will depend on the application and the user must determine suitability.

Beneficial Features:

- Vibration Dampening
- Thermally conductive
- Non-pumping during thermal cycling
- Easily mixed and one to one ratio
- Low toxicity
- Low cost alternative to other TC gap fillers

Product Handling Properties (typical):

<u>CHARACTERISTIC</u>	<u>VALUE</u>
PART A:	
Density (lbs./gallon)	13.8
Viscosity	Thixotropic
Color	Black
PART B:	
Density (lbs./gallon)	13.8
Viscosity	Thixotropic
Color	White
MIXED:	
Mix ratio (parts of A to B):	
by weight:	1 to 1
by volume:	1 to 1
Viscosity:	Paste
Gel Time (25°C, 10 grams)	30 minutes
Cure Time 25°C	24-48 hours
Cure Time 70°C	2 hours

Handling Safeguards

Closely follow instructions on the labels of Polymark materials containing information on the hazards associated with each particular product. Most silicone 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. 12/08

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.