



Technical Data Sheet

POLYMARK P543

POLYURETHANE DOMING SYSTEM

Features:

- Fast Curing at 25°C
- Tough and Self-healing
- Low User Sensitivity
- Low Moisture Gassing
- UV and Weathering Resistant
- Shore D-42 Hardness

Product Description:

Polymark P543 is a two component, room temperature curing polyurethane doming system. It is designed for covering of emblems and decals to produce an attractive 3-D product. Cured P543 is a tough, transparent elastomer with high gloss.

It is non-abrasive to dispensing equipment and well suited to automated operations. P543 is a DOT non-hazardous material and conforms to RoHS and REACH restrictions. P543 has much *lower user sensitivity* compared to other polyurethanes on the market today.

Typical Product Handling Properties:

<u>CHARACTERISTIC</u>	<u>VALUE</u>
RESIN:	
Color	Clear
Viscosity, 25°C	800 cps.
HARDENER:	
Color	Clear
Viscosity, 25°C	1,000 cps.
MIXING RATIO (Resin to Hardener):	
by weight	92.7 to 100
by volume	1 to 1
Gel Time, 25°C	10-12 minutes
Tack-free Time, 25°C	< 60 minutes
Time to Full Cure, 25°C	24-48 hours

Typical Cured Physical Properties

<u>CHARACTERISTIC</u>	<u>VALUE</u>
Cured Density (g/cc)	1.13
Cured Hardness (Shore D)	D-42
Cured Appearance	Clear, High Gloss

Polymark P543 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

While not producing moisture bubbles during cure, P543 Resin and Hardener are hygroscopic or moisture sensitive. They must be kept away from atmospheric moisture during storage. Desiccant cartridges are recommended in the drum air vent. After opening a sealed container, thoroughly purge the remaining air space with dry nitrogen (or equivalent inert gas) before closing the container.

Handling Safeguards:

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