

# Information About Dow Corning® 739 Plastic Adhesive

**Type**

One-part silicone rubber

**Physical Form**

Nonslumping paste

**Cure**

Alcohol cure; cures at room temperature upon exposure to water vapor in the air; gives off a small amount of methanol (methyl alcohol)

**Special Properties**

Adhesion to many plastics

**Primary Uses**

Bonding and sealing appliance parts, other plastic and metal substrates; maintenance and repair operations; formed-in-place gaskets

**DESCRIPTION**

Dow Corning® 739 Plastic Adhesive is a high-performance, one-component silicone rubber adhesive designed for a wide variety of industrial adhesive and sealing applications. It cures at room temperature by reaction with moisture in the air to produce a durable and flexible silicone rubber.

Special features of Dow Corning 739 Plastic Adhesive include:

- Ease of application; ready-to-use as supplied
- Good unprimed adhesion to plastics
- Non-acetic acid odor
- Noncorrosive; does not react with or corrode most metals
- Good weatherability

- Recognized under UL QMFZ2 94HB
- 100 percent silicone rubber

**USES**

Uses for Dow Corning 739 Plastic Adhesive include general OEM and assembly applications. Examples of specific uses include:

- Adhering sole plates to housings on industrial steam cleaning machines
- Sealing substrates in the fabrication of duct units
- Adhering windshields and splash boards to boat bodies
- Sealing and adhering plastic housings on sump pumps
- Applying weatherproofing seals to the unit bodies of refrigerated trucks

**TYPICAL PROPERTIES**

These values are not intended for use in preparing specifications.

**As Supplied**

	Color .....	Black, white
CTM <sup>1</sup> 0062	Flow, Sag or Slump, inches .....	Nil
CTM 0097	Specific Gravity .....	1.52
CTM 0364	Extrusion Rate (1/8" orifice, 90 psi), grams/minute .....	110

**Cure Characteristics – Exposed to Air at 77°F (25°C) and 50 percent RH**

CTM 0098	Skin-Over Time, minutes .....	20-30
CTM 0095	Tack-Free Time, minutes .....	45
	Cure Time (1/8" thickness), hours .....	24

**Physical Properties – As Cured 7 days at 77°F (25°C) and 50 percent RH**

CTM 0099	Durometer Hardness, Shore A, points .....	37
CTM 0137A	Tensile Strength, psi .....	225
CTM 0137A	Elongation, percent .....	640
CTM 0159A	Tear Strength, Die B, ppi .....	37
CTM 0243	Adhesion, Lap Shear (to glass), psi .....	200
CTM 0293	Typical Adhesion, Peel Strength <sup>2</sup> , lb/inch .....	20

**Electrical Properties – As Cured 7 days at 77°F (25°C) and 50 percent RH**

CTM 0112	Dielectric Constant	
	100 Hz .....	3.7
	100 kHz .....	3.7
CTM 0112	Dissipation Factor	
	100 Hz .....	0.0022
	100 kHz .....	<0.0002
CTM 0114	Dielectric Strength, volts/mil .....	440
CTM 0313	Volume Resistivity, ohm-cm .....	6.1 x 10 <sup>14</sup>

<sup>1</sup>CTMs (Corporate Test Methods) correspond to standard ASTM tests in most instances. Copies of CTMs are available upon request.

<sup>2</sup>Laboratory tests and market tests have demonstrated adhesion to many substrates, including acrylonitrile butadiene styrene, neoprene, polystyrene, anodized aluminum, glass and phenolic G-10.

**Specification Writers: Please obtain a copy of the Dow Corning Sales Specification for this product and use it as a basis for your specifications. It may be obtained from any Dow Corning Sales Office, or from Dow Corning Customer Service in Midland, MI. Call (517) 496-6000.**

- Sealing wood and metal hoppers to the metal frames of fertilizer carts
- Adhering decorative panels to the bodies of vending machines
- Adhering plastic moldings to plastic substrates for trim applications

*Dow Corning 739 Plastic Adhesive* is also used for maintenance and repair operations, including:

- Repairing air leaks in windows
- Bonding and sealing

Additionally, *Dow Corning 739 Plastic Adhesive* is used for pliable formed-in-place gasket applications.

### LIMITATIONS

*Dow Corning 739 Plastic Adhesive* is not intended for use:

- On materials that bleed oils or plasticizers
- In totally confined spaces (*Dow Corning 739 Plastic Adhesive* requires moisture to cure)
- On surfaces that will be painted
- In applications that require FDA approval

This material is neither tested nor represented as suitable for medical or pharmaceutical uses.

### HOW TO USE

#### Surface Preparation

All surfaces must be clean and dry. Metal and glass surfaces should be cleaned by wiping with a solvent-saturated, oil-free rag.<sup>1</sup>

### Priming

Priming is not normally required for most surfaces. A test placement prior to general use is always recommended. Some difficult-to-adhere-to plastics such as acrylic or polycarbonate may require *Dow Corning*® 1205 Primer. Some metals may require *Dow Corning*® 1200 Primer or low-VOC *Dow Corning*® P5200 Adhesion Promoter.

### SHIPPING LIMITATIONS

None.

### STORAGE AND SHELF LIFE

When stored at or below 80°F (27°C), *Dow Corning 739 Plastic Adhesive* has a shelf life of 15 months from date of manufacture. Keep containers tightly closed to avoid contact with moisture. Previously opened cartridges may be used by simply removing the cured plug of adhesive from the nozzle.

### PACKAGING

*Dow Corning 739 Plastic Adhesive* is supplied in 10.3-fl oz (305-mL) plastic cartridges and 4.5- and 40-gal (17- and 151.4-L) containers.

### SAFE HANDLING INFORMATION

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED. BEFORE HANDLING, READ PRODUCT AND MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE MATERIAL SAFETY DATA SHEET IS AVAILABLE FROM YOUR DOW CORNING REP-

REPRESENTATIVE, OR DISTRIBUTOR, OR BY WRITING TO DOW CORNING CUSTOMER SERVICE, OR BY CALLING (517) 496-6000.

### LIMITED WARRANTY – PLEASE READ CAREFULLY

Dow Corning believes that the information in this publication is an accurate description of the typical characteristics and/or uses of the product or products, but it is your responsibility to thoroughly test the product in your specific application to determine its performance, efficacy and safety. Suggestions of uses should not be taken as inducements to infringe any particular patent.

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<sup>1</sup>Follow solvent manufacturer's recommended safe handling procedures and applicable federal, state and local regulations.

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