

Resistive Silicone Paste

June 2011

Resistive High Temperature Silicone Paste - 110 Ω/sq

Part # MC10-0016-XX

DESCRIPTION MAST Technologies' resistive high temperature silicone paste is a two part silicone paste which is loaded with carbon particles. Resistive silicone paste can be used for loading antenna cavities, millimeter wave cavity resonances, or for printing onto resistive films. MAST Technologies' resistive silicone pastes can be used for prototyping and test or in production via an automated dispensing system.

APPEARANCE Two-part, pourable, black RTV silicone

PART NUMBERING: MC10-0016-XX
 01: 1 Quart Size
 Other sizes available, please contact MAST Technologies.

OPTIONS MAST Resistive Silicone Paste can be optimized between 100 -1000 Ω/sq. Standard temperature versions of this paste are also available. Contact at MAST engineer for more details.



PHYSICAL PROPERTIES (values shown are under development and intended to be representative only)

Typical Properties	MC10-0016-XX
Elastomer	Silicone Paste Elastomer
Description	Two-part, castable liquid silicone RTV
Appearance	Black
Product Forms	Cast parts, gap filler, cavity filling compound
Electrical Properties	110 +/-10 Ω/sq
Hardness (Shore A)	65
Operating Temperature Range	600°F
Mix Ratio	225:1 (base/curing agent)
Working Time at Room Temperature	2 hours
Primer	MAST MVA2 Primer
Recommended Cure Parameters	5 days at RT (full cure) see below

INSTRUCTIONS FOR USE

Vacuum Degassing: Remove any entrapped air during mixing by common vacuum degassing procedure. Slowly apply vacuum up to 28 inches Hg, and hold vacuum until presence of air is no longer evident.

Application Methods: Apply via caulking gun, SEM-KIT, or puttying for thicker caulk/paste material.

Cure Parameters: Dry to touch after 24 hours. Material can be handled after 3 days at RT and 50% RH, full cure after 5 days at RT and 50% RH. Cannot be accelerated by heat.

Surface Preparation for Bonding: Sand all bonding surfaces with medium grit sandpaper. Abrasive media blasting with aluminum oxide blasting media may be used for metal surfaces.

Primer Application and Adhesion: Apply a thin, uniform coat of MVA2 (or similar) primer to all bonding surfaces and allow 30 minutes at RT and 50% RH for drying. If bonding already cured sheet material, a 0.005" – 0.010" bond layer of MVA2 Adhesive may be required between bonding surfaces. MVA2 Adhesive is a one-part silicone RTV that shows excellent thermal resistance (equivalent to MPS2 base material) and bonds well when MVA2 Primer is used with it.

All information on this data sheet is based on laboratory testing and is not intended for design purposes. MAST Technologies makes no representations or warranties of any kind concerning this data. For part number quality assurance specifications, please contact a MAST Technologies technical representative.