9510

One-Part Epoxy Potting Compound

9510 is a black, rigid, one-part epoxy potting compound. It is a heat cure epoxy that provides unlimited working time at room temperature and does not require frozen storage.

Our 1-part epoxy resin provides exceptional chemical resistance against a wide variety of mild to harsh chemicals, including toluene, acetone and ethyl acetate. It also provides excellent electrical insulation and protects against static discharge, vibration, thermal shock, environmental humidity, salt water, fungus, and many harsh chemicals.



Features & Benefits

Minimum cure temperature of 80 °C

Ready to dispense—no mixing is required

Low viscosity of 4 800 cP

Excellent chemical resistance

Excellent adhesion to a wide variety of substrates, including metals, composites, glass, ceramics, and many plastics

Extremely high tensile and compressive strength

Solvent-free

Cure Instructions

The product will not cure at room temperature. Cure in an oven at one of these time/temperature options:

Temperature	80 °C	90 °C	120 °C
Time	3 h	1 h	30 min

Storage and Handling

Store between -40 and 22 ˚C in a dry area, away from sunlight (see SDS). Some of the components are sensitive to air. To maximize shelf life, always recap product firmly when not in use.

Available Packaging

Part #	Packaging	Net Vol.	Net Wt.
9510-30ML	Cartridge	30 mL	33.6 g
9510-300ML	Cartridge	300 mL	336 g
9510-3.6L	Can	3.6 L	4.03 kg
9510-18.9L	Pail	18.9 L	21.2 kg

Dispensing Accessories

Store between -40 and 22 ˚C in a dry area, away from sunlight (see SDS). Some of the components are sensitive to air. To maximize shelf life, always recap product firmly when not in use.

Part #	Dispensing Gun	Static Mixer
9510-30ML	8DG-30-1	N/A
9510-300ML	N/A	N/A

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Liquid Properties

Chemistry	Epoxy	—
Density	1.1 g/mL	ASTM D1475
Viscosity @ 25 ˚C	4 800 cP	Brookfield Engineering labs Inc. IPCTM-65- Method 2.4.24.4
Working Time [a]	Unlimited	—
Shrinkage	3.9%	Calculated
Shelf Life	1 y @ 22 ˚C 2 y @ 4 ˚C 2 y @ -10 ˚C	—

[a] Based on 100 g sample. Varies by volume and geometry.

Cured Properties

Flame Retardancy	No	—
Color	Black	—
Density	1.2 g/mL	Hydrostatic Weighing
Service Temperature Range	-65–150 ˚C	—
Intermittent Temperature	295 ˚C	—
Thermal Conductivity @ 25 ˚C Specfic Heat Capacity @ 25 ˚C Thermal Diffusivity @ 25 ˚C	0.3 W/(m·K) 1.6 J/(g·K) 0.1 mm^2/s	ASTM E1461
Glass Transition Temperature (T_g)	70 ˚C	ASTM E1545
Coefficient of Thermal Expansion (CTE)	74 ppm/˚C (Prior T_g) 217 ppm/˚C (After T_g)	ASTM E831
Hardness	84 D	ASTM D2240
Tensile Strength	20 N/mm^2	ASTM D638
Compressive Strength	90 N/mm^2	ASTM D695

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Cured Properties Continued

Lap Shear	9.2 N/mm^2 (Stainless Steel) 5.8 N/mm^2 (Aluminum) 3.8 N/mm^2 (ABS) 1.1 N/mm^2 (PC)	ASTM D1002
Resistivity	2.6 x 10^{13} Ω·cm	ASTM D257
Breakdown Voltage @ 3.175 mm Dielectric Strength @ 3.175 mm	50 200 V 400 V/mil	ASTM D149
Dielectric Constant @ 1 MHz Dissipation Factor @ 1 MHZ	3.7 0.2	ASTM D150
Chemical Absorption Weight Gain, 30 days @ 25 °C	9 % (Acetone) 13 % (Ethyl Acetate) 1 % (IPA) 9 % (Toluene) 0.5 % (Sulphuric Acid 3%) 3 % (Sulphuric Acid 30%) 3 % (Acetic Acid) 0.5 % (10% NaOH) 0.4 % (10% NaCl) 0.7 % (Water) 0 % (Transmission Oil) 0.1 % (Transformer Oil) 0.3 % (Gasoline)	—
Weight Loss @ 155 °C (600 hrs)	3.9 %	—

Application Instructions

Read the product SDS and Application Guide for more detailed instructions before using this product.

Recommended Preparation

Clean the substrate with 824 99.9% Isopropyl Alcohol, so the surface is free of oils, dust, and other residues.

Cartridge

1. Twist and remove the cap from the cartridge. Do not discard cap.
2. Dispense the adhesive evenly to both surfaces.
   a. For 30 mL size, insert the cartridge in the 8DG-30-1 dispensing gun (see Dispensing Accessories Application Guide).
3. To stop the flow, pull back on the plunger.
4. Clean nozzle to prevent contamination and material buildup.
5. Replace the cap on the cartridge.

Disclaimer: This information is believed to be accurate. It is intended for professional end-users who have the skills required to evaluate and use the data properly. M.G. Chemicals Ltd. does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.