

LOCTITE ABLESTIK EMI 8660S

February 2018

PRODUCT DESCRIPTION

LOCTITE ABLESTIK EMI 8660S provides the following product characteristics:

Technology	Coating, Silver Sintering
Appearance	Silver liquid
Cure	Heat cure
Application	Semiconductor, Coating
Filler Type	Silver
Product Benefits	<ul style="list-style-type: none"> • High electrical conductivity • High thermal conductivity • Sprayable • Good workability • Long work life • Excellent adhesion on mold compound and epoxy surfaces • Excellent adhesion to copper, gold and silver
Typical Applications	<ul style="list-style-type: none"> • Radio frequency (RF) • Wireless components • Memory • Sensors • Other sensitive devices
Application Method	Spraying, printing, dispensing

LOCTITE ABLESTIK EMI 8660S is an electrically conductive adhesive designed to achieve robust electromagnetic interference (EMI) shielding performance with extremely thin coating thickness at a single micrometer level for package level shielding applications.

The material has robust adhesion to mold compound, epoxy, copper, gold and silver surfaces.

When spray-coated, this material can be atomized to highly fine droplets for excellent uniformity at low to high coating thicknesses which can be controlled by equipment parameters.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield, 25 °C, mPa·s (cP):	
Spindle 18, Speed 5 rpm	340
Thixotropic Index (0.5/5 rpm)	3.0
Work Life @ 25°C, hours	24
Flash Point - See SDS	

TYPICAL DRYING PERFORMANCE

Recommended Curing Conditions

60 minutes @ 175°C

Oven atmosphere must be air, no ramp up.

The above cure profiles are guideline recommendations. Cure conditions (time and temperature) may vary based on customers' experience and their application requirements, as well as customer curing equipment, oven loading and actual oven temperatures.

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties

Adhesion, ASTM D3359

After Cure:

Mold Compound	5B
Copper	5B
Silver	5B
Gold	5B

After MSL 3 Conditioning:

Mold Compound	5B
Copper	5B
Silver	5B
Gold	5B

Weight Loss @ 250°C, % 13

Extractable Ionic Content @ 100 °C, ppm:

Chloride (Cl-)	<0.5
Sodium (Na+)	4
Potassium (K+)	1

Electrical Properties

Volume Resistivity, ohm-cm 1.00×10^5

Shielding performance @ 5 µm coating thickness, dB:

@ 2.6 to 3 GHz	83
@ 3 to 4 GHz	78

GENERAL INFORMATION

For safe handling information on this product, consult the Safety Data Sheet, (SDS).

THAWING:

- Allow container to reach room temperature before use
- After removing from the freezer, set the syringes to stand vertically while thawing
- DO NOT open the container before contents reach 25°C temperature. Any moisture that collects on the warmed up container should be removed prior to opening the container
- DO NOT re-freeze. Once thawed to 25°C, the adhesive should not be re-frozen

DIRECTIONS FOR USE

1. No special surface treatment is needed for the substrate surface before applying this material.
2. Before applying the material, it is recommended that the substrate is handled with care to prevent any organic contamination and/or residue.

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

STORAGE:

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

Optimal Storage : -40 °C

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

CLEAN-UP

The material can be cleaned with esters (butylacetate, ethylacetate) or ketones (MEK).

Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{psi} \times 145 = \text{N/mm}^2$
 $\text{MPa} = \text{N/mm}^2$
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

Disclaimer**Note**

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