

LOCTITE ABLESTIK EMI 8890SB

November 2020

PRODUCT DESCRIPTION

LOCTITE ABLESTIK EMI 8890SB provides the following product characteristics:

Technology	Coating, Silver Sintering
Appearance	Silver liquid
Filler Type	Silver
Product Benefits	• 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
Cure	Heat cure
Application	Electronic adhesive, Semiconductor Pastes
Typical Package Application(s)	• Radio frequency (RF) • Wireless components • Memory • Sensors • Other sensitive devices
Application Method	Spraying, printing, dispensing

LOCTITE ABLESTIK EMI 8890SB 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 @ 25 °C, mPa·s (cP):	
Spindle 18, speed 5 rpm	500
Work Life @ 25°C, hours	24

TYPICAL DRYING PERFORMANCE

Recommended Cure

60 minutes @ 175°C

Cure in hot air oven, no ramp up necessary.

The above cure profile(s) are guideline recommendation(s). These conditions (time and temperature) may vary based on customers' experience and specific application requirements, as well as customer curing equipment, oven loading and actual oven temperatures.

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties

Sample cured 1 hour @ 175°C

Adhesion, ASTM D3359:

Mold Compound:

After Cure 5B

After MSL 3 Conditioning 5B

Weight Loss @ 300°C, % 19

Extractable Ionic Content @ 100 °C, ppm:

Sodium (Na+) 0.5

Potassium (K+) 5

Chloride (Cl-) 2

Electrical Properties

Sample cured 1 hour @ 175°C

Volume Resistivity, ohm-cm 7×10^{-6}

Shielding performance @ 5 µm coating thickness :

@ 2.6 to 3 GHz 90

@ 3 to 4 GHz 90

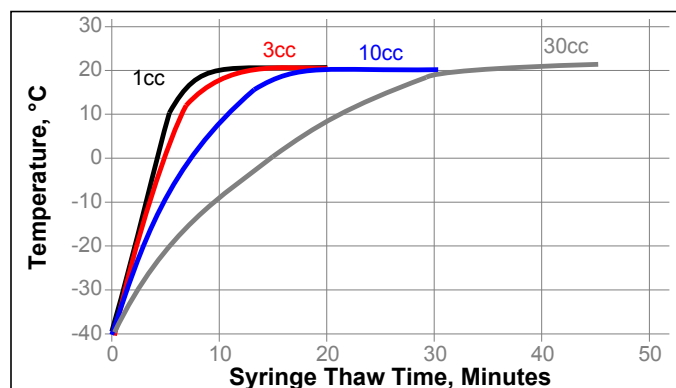
GENERAL INFORMATION

Please consult the Safety Data Sheet (SDS) for safe handling information of this product.

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be used with chlorine or other strong oxidizing materials unless otherwise specifically stated.

Thawing

- Allow container to reach room temperature before use.
- After removing from the freezer, set the syringes to stand vertically while thawing.
- Thaw times depend on syringe size.
- Consult handling guide for more information.
- DO NOT open the container before contents reach 25°C temperature. Any moisture that collects on the thawed 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. Thawed material should immediately be placed on dispense equipment for use.
2. If the adhesive is transferred to a final dispensing reservoir, care must be exercised to avoid entrapment of contaminations and/or air into the adhesive.
3. Adhesive must be completely used within the products recommended work life.
4. No special surface treatment is needed for the substrate surface before applying this material.
5. Prior to material application, it is recommended that the substrate be handled with care to prevent any organic contamination and/or residue.

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. Storage below -40°C or above -20°C can adversely affect product properties.

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 Henkel Representative

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.

Conversions

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

Disclaimer

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Reference 1