

LOCTITE ABLESTIK EMI 8880S

February 2018

PRODUCT DESCRIPTION

LOCTITE ABLESTIK EMI 8880S provides the following product characteristics:

| Technology | Coating, Silver Sintering |
|----------------------|---|
| Appearance | Silver liquid |
| Cure | Heat cure |
| Application | Semiconductor, Coating |
| 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 |
| Typical Applications | Radio frequency (RF) Wireless components Memory Sensors Other sensitive devices |
| Application Method | Spraying, printing, dispensing |

LOCTITE ABLESTIK EMI 8880S 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 | 530 |
| Thixotropic Index (0.5/5 rpm) | 2.7 |
| 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, % | 17 |
|--|------|
| Extractable Ionic Content @ 100 °C, ppm: | |
| Chloride (Cl-) | <0.5 |
| Sodium (Na+) | 2 |
| Potassium (K+) | 1 |

Electrical Properties

| Volume Resistivity, ohm-cm | 5.00×10-6 |
|---|---------------|
| Shielding performance @ 5 µm coating th | ickness , dB: |
| @ 2.6 to 3 GHz | 92 |
| @ 3 to 4 GHz | 89 |

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

 $(^{\circ}C \ge 1.8) + 32 = ^{\circ}F$ kV/mm $\ge 25.4 =$ V/mil mm / 25.4 = inches N $\ge 0.225 =$ lb N/mm $\ge 5.71 =$ lb/in psi $\ge 145 =$ N/mm² MPa = N/mm² N·m $\ge 8.851 =$ lb·in N·m $\ge 0.738 =$ lb·ft N·mm $\ge 0.142 =$ oz·in mPa·s = cP

Disclaimer

Note

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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