

LOCTITE ABLESTIK 2958

August 2012

PRODUCT DESCRIPTION

LOCTITE ABLESTIK 2958 provides the following product characteristics:

| | |
|---|--|
| Technology | Epoxy |
| Appearance | Silver |
| Cure | Heat cure |
| Product Benefits | <ul style="list-style-type: none"> • Snap curable • Thermally conductive • Electrically conductive • Long pot life • Screen printable |
| Mix Ratio, by weight - Resin : Hardener | 100 : 6 |
| Typical Assembly Applications | Chip bonding, Electrical modules, Printed circuitry, Wave guides and High frequency shields |
| Operating Temperature | -60 to 175 °C |
| Application | Bonding or Sealing |

LOCTITE ABLESTIK 2958 is a two-part, smooth paste of specially refined and processed epoxy and silver components, recommended for electronic, microelectronic and die-attach bonding and sealing applications that require superior electrical and mechanical properties. It is free of contaminating solvents and additives and develops strong durable seals and coatings.

TYPICAL PROPERTIES OF UNCURED MATERIAL

| | |
|------------------------------|--------|
| Mixed Viscosity, cps @ 25 °C | 40,000 |
| Thixotropic Index (5/50 rpm) | 2.9 |
| Specific Gravity, mixed | 2.65 |
| Reactive solids contents, % | 100 |
| Pot life, hours | 4 |

Flash Point - See SDS

TYPICAL CURING PERFORMANCE

Cure Schedule

| |
|-----------------------|
| 15 minutes @ 100°C or |
| 5 minutes @ 125°C or |
| 2 minutes @ 150°C |

The above cure profile is a guideline recommendation. 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 :

| | |
|--|-----------------------|
| Coefficient of Thermal Expansion, cm/cm/°C | 4.9×10 ⁻⁰⁵ |
| Glass Transition Temperature (Tg), °C | 92 |
| Thermal Conductivity, W/(m-K) | 1.50×10 ⁰⁰ |
| Hardness, Shore D | 80 |

Electrical Properties:

| | |
|------------------------------|--------|
| Volume Resistivity, ohms-cm: | |
| 2 minutes @ 150°C | 0.0005 |
| 5 minutes @ 125°C | 0.0003 |

TYPICAL PERFORMANCE OF CURED MATERIAL

Lap Shear Strength :

Aluminum:

| | |
|-----------------------------|---------------------|
| Aged @ 150 °C for 2 minutes | N/mm ² 7 |
| | (psi) (1,000) |
| Aged @ 125 °C for 5 minutes | N/mm ² 7 |
| | (psi) (1,000) |

GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. Carefully clean and dry all surfaces to be bonded.
2. Remove clamp and thoroughly mix the LOCTITE ABLESTIK 2958 epoxy adhesive system components in the handy BIPAX mixing-dispenser package until color is uniform throughout.
3. Apply this completely mixed adhesive to the prepared surfaces, and gently press these surfaces together. Contact pressure is adequate for strong, reliable bonds; however, maintain contact until adhesive is completely cured.

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 : 27 °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.

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

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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Reference 0.3