

## LOCTITE ABLESTIK C990J 316

April 2019

#### PRODUCT DESCRIPTION

LOCTITE ABLESTIK C990J 316 provides the following product characteristics:

| Technology         | Ероху                                      |
|--------------------|--|
| Appearance         | Silver                                     |
| Components         | One-component                              |
| Product Benefits   | Electrically conductive                    |
|                    | <ul> <li>Good thermal stability</li> </ul> |
|                    | Low extractable ionics                     |
| Application Method | Dispense                                   |
| Filler Type        | Silver                                     |
| Cure               | Heat Cure                                  |
| Application        | Electrically Conductive Adhesive           |

LOCTITE ABLESTIK C990J 316 die attach is versatile and is designed for microelectronic applications.

#### TYPICAL PROPERTIES OF UNCURED MATERIAL

| Viscosity @ 25 °C,            | 44,000 |
|-------------------------------|--------|
| Shelf Life @ -20 to 0°C, days | 180    |
| Flash Point - See SDS         |        |

#### TYPICAL CURING PERFORMANCE

**Recommended Cure Schedule** 

60 minutes @ 150°C

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

| Extractable Ionic Content @ 100°C, : |        |
|--------------------------------------|--------|
| Chloride (Cl-)                       | ≤20    |
| Sodium (Na+)                         | ≤10    |
| Potassium (K+)                       | ≤10    |
| Ammonium (NH4+)                      | ≤10    |
| Electrical Properties                |        |
| Volume Resistivity @ 25°C, ohm-cm    | <0.001 |

#### TYPICAL PERFORMANCE OF CURED MATERIAL Miscellaneous

#### Miscellaneous

| Die Shear Strength :             |      |
|----------------------------------|------|
| 1.25 x 1.25 mm Si die @ 25°C, Kg | 6.12 |
| 2.5 x 2.5 mm Si die @ 200°C, Kg  | 1.22 |

#### GENERAL INFORMATION

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

#### DIRECTIONS FOR USE

1. Allow material to reach ambient temperature before use.

- Some separation of components is common during shipping and storage. If separation occurs, stir gently until uniform, being careful not to entrap air.
- Equipment parts can be cleaned using solvents such as acetone, methyl ethyl ketone, ethanol, isopropanol or LOCTITE STYCAST CLEANER 50306.

#### STORAGE:

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

#### Optimal Storage : -20 to 0 °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.

#### 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

 $(^{\circ}C x 1.8) + 32 = ^{\circ}F$ kV/mm x 25.4 = V/mil mm / 25.4 = inches N x 0.225 = lb N/mm x 5.71 = lb/in psi x 145 = N/mm<sup>2</sup> MPa = N/mm<sup>2</sup> N·m x 8.851 = lb/in N·m x 0.738 = lb/ft N·mm x 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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Reference 0.1