

# LOCTITE® ABLESTIK ICP 8118SP

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# PRODUCT DESCRIPTION

LOCTITE® ABLESTIK ICP 8118SP provides the following product characteristics:

| product orial actorication. |                                |
|-----------------------------|--------------------------------|
| Technology                  | Silicone                       |
| Appearance                  | Gray liquid                    |
| Product Benefits            | One component                  |
|                             | Snap cure                      |
|                             | Fast cure                      |
|                             | High adhesion                  |
|                             | Electrically conductive        |
|                             | Suitable for high              |
|                             | speed printing                 |
| Cure                        | Heat cure                      |
| Application                 | Electronic adhesive, Component |
|                             | assembly adhesives             |

LOCTITE® ABLESTIK ICP 8118SP is an electrically conductive adhesive designed for applications where fast cure is required. It is ideally suited for high throughput production processes and applications where high adhesion is required. Low contact resistance is achieved on noble metallization during reliability testing.

# TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Cone & Plate, @ 25 °C , mPa·s (cP):
Plate 20 mm, 200 um gap @ Shear rate 15 s<sup>-1</sup> 40,000
Thixotropic Index 2.75
Specific Gravity, g/cc 2.6
Shelf Life, days:
@ -40°C 180
@ -20°C 90

# TYPICAL CURING PERFORMANCE

# **Recommended Cure**

<150 seconds @ 150°C

# **Alternate Cure Schedule**

<90 seconds @ 180°C

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 Electrical Properties

Volume Resistivity, ohm-cm:
Sample cured 15 minutes @ 150°C in box 0.00

# **Adhesive Properties**

Lap Shear Strength:

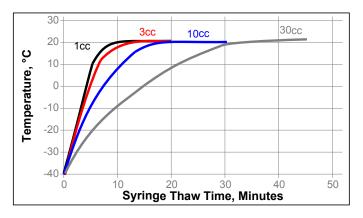
Sample cured 90 seconds @ 180°C in N/mm² 3 hot plate (psi) (435)

#### **GENERAL INFORMATION**

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

#### **Thawing**

- 1. Allow container to reach room temperature before use.
- 2. After removing from the freezer, set the syringes to stand vertically while thawing.
- 3. Thaw times depend on syringe size.
- 4. Consult handling guide for more information.
- DO NOT open the container before contents reach 25
   <sup>°</sup>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 contaminants and/or air into the adhesive.
- 3. Adhesive must be completely used within the product's recommended work life.
- 4. Alternate dispense amounts may be used depending on the application requirements.
- 5. Star or crossed shaped dispense patterns will yield fewer bondline voids than the matrix style of dispense

#### Storage

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

Optimal Storage: -40 to -20°C. Storage below -40°C or greater than -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 Henkel representative for assistance and recommendations on the specifications of this product.

#### Conversions

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

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