

LOCTITE® ABLESTIK ICP 3510

October 2021

PRODUCT DESCRIPTION

LOCTITE® ABLESTIK ICP 3510 provides the following product characteristics:

Technology	Epoxy
Appearance	Silver
Product Benefits	<ul style="list-style-type: none"> Electrically conductive One component No bleed Good dispense behavior Fast cure at high temperatures High bond strength Heat resistant after cure
Operating Temperature	150°C
Cure	Heat cure
Filler Type	Silver Plated Copper
Application	Component assembly adhesives, Electrically Conductive Adhesive

LOCTITE® ABLESTIK ICP 3510 adhesive is designed for use in automated assembly and in-line curing operations.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, Brookfield, 25 °C, mPa·s (cP):

Plate 2 cm @ Shear rate 15 s⁻¹ 10,500

Thixotropic Index 4.3

Density, g/cm³ 3.4

Pot life @ 18 to 25°C, days 3

Shelf Life @ -25 to -18°C (from date of manufacture), days 180

TYPICAL CURING PERFORMANCE

Cure Schedule

Convection Oven:

1hour @ 100°C

45minutes @ 120°C

30minutes @ 150°C

Hot Plate:

60 seconds maximum @ 180 to 190°C

Properties of the cured material will depend upon the cure schedule used. Low temperature cure will reduce electrical conductivity.

The above cure profile is a guideline recommendation. These cure 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, ohms-cm 0.0014

Adhesion Properties:

Tensile Lap Shear Strength, N/mm² 11
(psi) (1,595)

GENERAL INFORMATION

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

DIRECTIONS FOR USE

1. Complete cleaning of the substrates should be performed to remove contamination such as oxide layers, dust, moisture, salt and oils which can cause poor adhesion or corrosion in a bonded part.
2. Frozen storage of uncured material is recommended to maintain viscosity and may be helpful in retarding settling of the silver filler.
3. Packages removed from storage must be allowed to return to ambient temperature before use. This normally takes 2hours for a 310cc cartridges.
4. LOCTITE® ABLESTIK ICP 3510 is applied by dispense.

STORAGE

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

Optimal Storage: -25 to -18°C. Storage below -25°C or above -18°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.

Conversions

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

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.

Reference 1

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