

LOCTITE® ABLESTIK A 316-43

October 2020

PRODUCT DESCRIPTION

LOCTITE® ABLESTIK A 316-43 provides the following product characteristics:

Technology	Epoxy
Appearance	Beige paste
Product Benefits	• One component • Chemical resistant • Thermal shock resistant
Cure	Heat cure
Operating Temperature	-40 to +155 °C
Application	Electronic Encapsulants, Potting and Casting

LOCTITE® ABLESTIK A 316-43 is specially formulated for bonding end cap adhesive for hydraulic oil and other high temperature industrial and aerospace filters. It is also used for bonding aluminum oxide wafers to metal heat sinks.

LOCTITE® ABLESTIK A 316-43 has shown excellent resistance to water, solvents, Skydrol JP-4 and other harsh chemicals. It also offers better shock resistance than other LOCTITE® ABLESTIK A 316 series materials.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Viscosity, mPa·s (cP):	
Spindle 6, speed 10 rpm	25,000
Density, g/cm³	1.55
Shelf Life @ 25°C, days	120

TYPICAL CURING PERFORMANCE**Cure Schedule**

- 20 minutes @ 120°C or
- 3 minutes @ 160°C or
- 1 minute @ 180°C

This product generates moderate heat during cure. No adverse exotherm effects are obtained when cured at 120°C in masses up to approximately 50 grams.

The above cure profiles are guideline recommendations. 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**Physical Properties :**

Hardness, Shore D:	
@ 25°C	88
@ 120°C	70

Electrical Properties:

Volume Resistivity @ 25°C, ohm-cm	1×10 ¹⁴
Dielectric Strength, kV/mm	15.3

Adhesion Properties:

Tensile Lap Shear Strength @ 25 °C:	
Aluminum to aluminum	N/mm² 17.2 (psi) (2,500)

GENERAL INFORMATION

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

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 contaminations and/or air into the adhesive.
3. Adhesive must be completely used within the products 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 pattern.

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: 25°C. Storage below 25°C or above 25°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

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

Disclaimer

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