

LOCTITE ABLESTIK CT 4042-30

May 2015

PRODUCT DESCRIPTION

LOCTITE ABLESTIK CT 4042-30 provides the following product characteristics:

Technology	Epoxy
Appearance	Silver
Filler Type	Silver
Components	Two components - requires mixing
Mix Ratio, Part A:Part B	1 : 1
Cure	Heat cure
Product Benefits	<ul style="list-style-type: none"> Two component Easy mixing Fast cure at high temperatures
Application Method	Dispense or stencil/screen printing
Operating Temperature	-45 to +150°C
Application	Assembly

LOCTITE ABLESTIK CT 4042-30 silver filled epoxy adhesive is designed for high throughput assembly operations. It is suited for die and component bonding in microelectronic applications.

LOCTITE ABLESTIK CT 4042-30 is also available in premixed and frozen version, LOCTITE ABLESTIK CT 4042-30. LOCTITE ABLESTIK CT 4042-30 is the faster curing version of LOCTITE ABLESTIK CT4042-1 PTA, PTB.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Part A Properties LOCTITE ABLESTIK CT 4042-30 PTA

Viscosity Brookfield # TC, 10 rpm @ 25°C, mPa·s (cP) 100,000

Part B Properties LOCTITE ABLESTIK CT 4042-30 PTB

Viscosity Brookfield # TC, 10 rpm @ 25°C, mPa·s (cP) 70,000

Mixed Properties LOCTITE ABLESTIK CT 4042-30 PTA, PTB

Mixed Viscosity Brookfield # TD, 10 rpm @ 25°C, mPa·s (cP) 50,000

Density, g/cm³ 3.3

Percent Silver, % 71

Shelf Life (from date of qualification in original seal):

In kits @ 0 to 8°C, days 365

Premixed & Frozen @ -25 to -18°C, days 91

Flash Point - See MSDS

TYPICAL CURING PERFORMANCE

Cure Schedule

60 minutes @ 100°C

20 minutes @ 120°C

10 minutes @ 150°C

30 to 60 seconds @ 190°C (Hot plate cure)

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

Glass Transition Temperature, °C	90
Coefficient of Linear Thermal Expansion, ppm/°C	167
Thermal Conductivity, W/(m-K)	2.5
Extractable Ionic Content, :	
Chloride (Cl-)	50
Sodium (Na+)	5
Potassium (K+)	1
Ammonium (NH4+)	200

Electrical Properties

Volume Resistivity, ohms-cm	2×10 ⁻⁴
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TYPICAL PERFORMANCE OF CURED MATERIAL

Shear Strength

Tensile Lap Shear Strength	N/mm ² 9 (psi) (1,310)
Die Shear Strength: 1.27 x 1.27 mm die, Kg	3

GENERAL INFORMATION

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

DIRECTIONS FOR USE

- Mix equal parts by weight of Part A and Part B.
- Mix correct proportions of A and B components by weight, using a clean metal mixer.
- Avoid entrapment of air or moisture.
- Check A and B containers for silver settling before use. If settling occurs, stir gently to resuspend silver before use.

STORAGE:

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

Optimal Storage: LOCTITE ABLESTIK CT 4042-30 adhesive packaged in kits may be stored at 0 to 8°C for up to one year. Premixed and frozen adhesive must be continually stored at -25 to -18°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:**

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