

# LOCTITE ABLESTIK A164-1

September 2013

**PRODUCT DESCRIPTION**

LOCTITE ABLESTIK A164-1 provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Appearance</b>	Tan
<b>Cure</b>	Heat cure
<b>Product Benefits</b>	<ul style="list-style-type: none"><li>• Non-conductive</li><li>• Good adhesion</li><li>• Good peel strength</li><li>• Excellent thermal shock resistance</li><li>• One component</li></ul>
<b>Application</b>	Automotive Electronics
<b>Substrates</b>	Metals, Glass and Plastics

**TYPICAL PERFORMANCE OF CURED MATERIAL**

Tensile Lap Shear Strength, ASTM-D-2240:

Aluminum, Kg/cm<sup>2</sup> (MPa)

Substrate	@25°C
Aluminum	200 (19.5)

**TYPICAL PROPERTIES OF UNCURED MATERIAL**

Viscosity @ 25 °C, mPa·s (cP) 20,000

Shelf Life:

@ 0 to 8°C, days 121

@ 18 to 25°C, days 91

Density, ASTM-D-792, g/cc 1.1

Flash Point - See MSDS

**TYPICAL CURING PERFORMANCE****Cure Schedule**

60 minutes @ 120°C

40 minutes @ 140°C

20 minutes @ 160°C

Cure at any one of the recommended cure schedules.

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:**

Coefficient of Thermal Expansion TMA:

Below Tg, cm/cm/°C 93

Above Tg, cm/cm/°C 190

Glass Transition Temperature, °C 60

Service Temperature, °C -40 to +125

Hardness, Shore D ASTM-D-2240, min, @ 25°C 80

Water Absorption, %:

@ 23°C, 24 hours 0.16

IEEE Thermal Resistant Class E

**GENERAL INFORMATION**

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

**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. DO NOT open the container before contents reach 25°C temperature. Any moisture that collects on the thawed container should be removed prior to opening the container.
4. DO NOT re-freeze. Once thawed to -40°C, the adhesive should not be re-frozen.

**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**

(°C x 1.8) + 32 = °F

kV/mm x 25.4 = V/mil

mm / 25.4 = inches

N x 0.225 = lb

N/mm x 5.71 = lb/in

N/mm<sup>2</sup> x 145 = psi

MPa = N/mm<sup>2</sup>

MPa x 145 = psi

N·m x 8.851 = lb·in

N·m x 0.738 = lb·ft

N·mm x 0.142 = oz·in

mPa·s = cP

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## Reference 0.3