Technical Data Sheet

LOCTITE ABLESTIK 3888

November 2016

PRODUCT DESCRIPTION

LOCTITE ABLESTIK 3888 provides the following product characteristics:

Technology	Epoxy
Chemical Type	Epoxy
Appearance (Resin)	Silver paste[LMS]
Appearance (Hardener)	Clear to light straw[LMS]
Appearance (Mixture)	Silver solid[LMS]
Components	Two part - Resin & Hardener
Viscosity	Thick paste
Cure	Room temperature cure and Heat cure
Application	Bonding
Key Substrates	Electronic components
Other Application Areas	Thermal conduction
Dispense Method	Syringe
Operating Temperature	Up to +80°C

LOCTITE ABLESTIK 3888 is designed for bonding of metals, ceramics, rubbers and plastics as used in electronic parts, where good adhesion combined with electrical and thermal conductivity is required. Typical applications include solder replacement, repair/rework of interconnections, and bonding of heat sensitive components where solder temperatures are impractical.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C	2.5
Mix Ratio, Resin: Hardener (if mixed on-site)	100:6
Pot life (once mixed or thawed), minutes	90
Flash Point - See SDS	

TYPICAL CURING PERFORMANCE

Recommended Curing Conditions:

24 hours @ 23 °C
2 hours @ 65 °C
1 hour @ 125 °C
30 minutes @ 150 °C

TYPICAL PROPERTIES OF CURED MATERIAL

Cured for 1 hour @ 65 °C

Physical Properties:

Coefficient of Thermal Expansion, ISO 11359-2, K^{-1}	$<50\times10^{-6}$
Coefficient of Thermal Conductivity ASTM F 433, W/(m·K)	>1.5
Glass Transition Temperature, ISO 11357-2, °C	50
Extractable Ionic Content, MIL 883 E, , µg/g:	
Fluorine	<6.0
Chloride	95.8
Potassium	4.2
Sodium	2.8
Shore Hardness, ISO 868, Durometer D	≥77[LMS]

Electrical Properties:

Volume Resistivity, IEC 60093, Ω·cm	$<0.1\times10^{-3}$

Cured for 1 hour @ 125 °C

Electrical Properties:

Volume Resistivity, IEC 60093, Ω·cm	$<0.5\times10^{-3}$ [LMS]

TYPICAL PERFORMANCE OF CURED MATERIAL

Adhesive Properties

Cured for 1 hour @ 65 °C

Lap Shear Strength, ISO 4587:

Aluminum (etched & abraded):

0.127 mm gap	N/mm²	≥3.5[LMS]
	(psi)	(≥500)

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

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

Storage

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

If supplied as separate containers of parts A and B, store at room temperature. If supplied pre-mixed and frozen, store at -40 °C. Shelf life will vary with speciality packages . 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.

Loctite Material Specification[LMS]

LMS dated August 23, 2004 (Resin) and LMS dated August 15, 2001 (Hardener). Test reports for each batch are available for the indicated properties. LMS test reports include selected QC test parameters considered appropriate to specifications for customer use. Additionally, comprehensive controls are in place to assure product quality and consistency. Special customer specification requirements may be coordinated through Henkel Loctite Quality.

Conversions

(°C x 1.8) + 32 = °F
kV/mm x 25.4 = V/mil
mm / 25.4 = inches
µm / 25.4 = mil
N x 0.225 = lb
N/mm x 5.71 = lb/in
N/mm² x 145 = psi
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

Reference 1