

# LOCTITE ABLESTIK 3888

February 2016

## PRODUCT DESCRIPTION

LOCTITE ABLESTIK 3888 provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Chemical Type</b>	Epoxy
<b>Appearance (Resin)</b>	Silver paste <sup>LMS</sup>
<b>Appearance (Hardener)</b>	Clear to light straw <sup>LMS</sup>
<b>Appearance (Mixture)</b>	Silver solid <sup>LMS</sup>
<b>Components</b>	Two part - Resin & Hardener
<b>Viscosity</b>	Thick paste
<b>Cure</b>	Room temperature cure and Heat cure
<b>Application</b>	Bonding
<b>Key Substrates</b>	Electronic components
<b>Other Application Areas</b>	Thermal conduction
<b>Dispense Method</b>	Syringe
<b>Operating Temperature</b>	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 <sup>-1</sup>	<50×10 <sup>-6</sup>
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<sup>LMS</sup>

### Electrical Properties:

Volume Resistivity, IEC 60093, Ω·cm <0.1×10<sup>-3</sup>

Cured for 1 hour @ 125 °C

### Electrical Properties:

Volume Resistivity, IEC 60093, Ω·cm <0.5×10<sup>-3</sup> 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/mm <sup>2</sup> ≥3.5 <sup>LMS</sup>
	(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<sup>LMS</sup>

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

$\mu\text{m} / 25.4 = \text{mil}$   
 $\text{N} \times 0.225 = \text{lb}$   
 $\text{N/mm} \times 5.71 = \text{lb/in}$   
 $\text{N/mm}^2 \times 145 = \text{psi}$   
 $\text{MPa} \times 145 = \text{psi}$   
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$   
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$   
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$   
 $\text{mPa}\cdot\text{s} = \text{cP}$

**Note:**

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

**In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:**

In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

**In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:**

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

**In case products are delivered by Henkel Corporation, Resin Technology Group, Inc., or Henkel Canada Corporation, the following disclaimer is applicable:**

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

**Trademark usage**

Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

**Reference 1**