



**3508™**

October 2009

**PRODUCT DESCRIPTION**

3508™ provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Appearance</b>	Black
<b>Components</b>	One component
<b>Product Benefits</b>	<ul style="list-style-type: none"> <li>• Reworkable</li> <li>• Pb-free applications</li> <li>• Eliminates post-reflow dispenses and cure steps</li> <li>• Improves mechanical reliability of hand-held devices</li> </ul>
<b>Cure</b>	Reflow
<b>Application</b>	Cornerfill
<b>Typical Assembly Applications</b>	Chip scale packages and BGA

3508™ reworkable cornerfill is designed to cure during pb-free reflow while allowing self-alignment of IC components. It can be pre-applied to the board at the corners of the pad site using a standard SMA dispenser.

**TYPICAL PROPERTIES OF UNCURED MATERIAL**

Viscosity, Cone & Plate, @ 25 °C mPa·s (cP)	50,000
Specific Gravity @ 25 °C	1.24
Pot Life @ 25°C, days	>30
Shelf Life @ 2 to 8°C, months	6
Flash Point - See MSDS	

**TYPICAL CURING PERFORMANCE**

**Recommended Cure Schedule**

Pb-free solder reflow profile @ 245°C  
(3 hours @ 180°C for Tg testing)

The above cure profile is a guideline recommendation. 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 , ppm/°C:	
Below Tg	55
Above Tg	175
Glass Transition Temperature (Tg) by TMA, °C	115
Shore Hardness, Durometer D	71
Storage Modulus, 25°C, GPa	2.48
Tensile Modulus	N/mm <sup>2</sup> 1,130
	(psi) (163,892)
Tensile Strength	N/mm <sup>2</sup> 56.5
	(psi) (8,190)

**GENERAL INFORMATION**

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

**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.**

**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: 2 to 8°C. Storage below 2°C or greater than 8°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 Technical Service Center or Customer Service Representative.

**Do not return products to refrigerated storage; any surplus product should be discarded.**

**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 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



**Note**

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.

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