

# LOCTITE<sup>®</sup> EA 9131

Known as LOCTITE<sup>®</sup> Fixmaster<sup>®</sup> General Purpose Epoxy Mixer Cups  
January 2015

## PRODUCT DESCRIPTION

LOCTITE<sup>®</sup> EA 9131 provides the following product characteristics:

<b>Technology</b>	Epoxy
Chemical Type (Resin)	Epoxy
Chemical Type (Hardener)	Polyamide
Appearance (Resin)	Blue viscous liquid <sup>LMS</sup>
Appearance (Hardener)	Yellow viscous liquid <sup>LMS</sup>
Appearance (Mixture)	Translucent
Components	Two component - requires mixing
Mix Ratio, by weight - Resin : Hardener	3 : 2
Viscosity	Paste
<b>Cure</b>	Room temperature cure
<b>Application</b>	Bonding-maintenance

LOCTITE<sup>®</sup> EA 9131 are suitable for bonding metals, glass, ceramics, most plastics, wood and stone. It will also fill porosities and voids and may be used to build up surfaces that have been worn. When fully cured, it may be machined or sanded. Typical applications include the production, maintenance and prototype bonding of metals, ceramics, concrete, wood, glass and most plastics.

**NOTE:** LOCTITE<sup>®</sup> EA 9131 are not recommended for polyethylene and polypropylene.

## TYPICAL PROPERTIES OF UNCURED MATERIAL

### Resin:

Specific Gravity @ 25 °C	1.68
Flash Point - See SDS	
Viscosity, Brookfield - RVT, 25 °C, mPa·s (cP):	
Spindle 7., speed 2.5 rpm	350,000 to 500,000 <sup>LMS</sup>

### Hardener:

Specific Gravity @ 25 °C	1.4
Flash Point - See SDS	
Viscosity, Brookfield - RVT, 25 °C, mPa·s (cP):	
Spindle 7., speed 2.5 rpm	200,000 to 400,000 <sup>LMS</sup>

### Mixed:

Pot life @ 25 °C, hours	1
Working Time @ 25 °C, hours	1.5
Cure Time @ 25 °C, hours	24

## TYPICAL PROPERTIES OF CURED MATERIAL

### Physical Properties:

Tensile Strength, ISO 527-3	N/mm <sup>2</sup>	27.6
	(psi)	(4,000)

## TYPICAL PERFORMANCE OF CURED MATERIAL

### Adhesive Properties

Cured for 24 hours @ 22 °C

Lap Shear Strength, ISO 4587:

Steel (grit blasted)	N/mm <sup>2</sup>	≥10.3 <sup>LMS</sup>
	(psi)	(≥1,493)

Impact Strength, ISO 9653, kg·m:

Steel (grit blasted)	0.835
----------------------	-------

## 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).**

Where aqueous washing systems are used to clean the surfaces before bonding, it is important to check for compatibility of the washing solution with the adhesive. In some cases these aqueous washes can affect the cure and performance of the adhesive.

This product is not normally recommended for use on plastics (particularly thermoplastic materials where stress cracking of the plastic could result). Users are recommended to confirm compatibility of the product with such substrates.

### Directions for use:

- Bond areas should be clean and free from grease. Clean all surfaces with a Loctite<sup>®</sup> cleaning solvent and allow to dry.
- For maximum strength, surface abrasion is recommended. A fine to medium grit emery cloth or sandpaper is best. Wash after abrading.
- Peel off the clear plastic rim from the top of the mixer cup.
- Depress the center of the cup to form the mixing bowl.
- Mix until the product has a uniform color. The adhesive is packaged in a pre-measured kit. This ensures consistent performance since resin and hardener are always properly measured.
- Apply the mixed adhesive to properly prepared surfaces. Apply a film of adhesive and apply light pressure evenly to spread the adhesive over as much surface as possible for best results.
- Wipe away any excess compound.
- Excess uncured adhesive can be wiped away with organic solvent (e.g. Acetone).

**Loctite Material Specification<sup>LMS</sup>**

LMS dated October 16, 1995. 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 Quality.

**Storage**

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

**Optimal Storage: 8 °C to 21 °C. Storage below 8 °C or greater than 28 °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.

**Conversions**

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$   
 $\text{kV/mm} \times 25.4 = \text{V/mil}$   
 $\text{mm} / 25.4 = \text{inches}$   
 $\mu\text{m} / 25.4 = \text{mil}$   
 $\text{N} \times 0.225 = \text{lb}$   
 $\text{N/mm} \times 5.71 = \text{lb/in}$   
 $\text{N/mm}^2 \times 145 = \text{psi}$   
 $\text{MPa} \times 145 = \text{psi}$   
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$   
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$   
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$   
 $\text{mPa}\cdot\text{s} = \text{cP}$

**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 1.1