

LOCTITE® EA E-909™Known as LOCTITE® E-909™
July 2016**PRODUCT DESCRIPTION**

LOCTITE® EA E-909™ provides the following product characteristics:

Technology	Epoxy
Chemical Type	Epoxy
Appearance	Grey lump free, no contamination ^{LMS}
Components	One component - requires no mixing
Cure	Heat cure
Product Benefits	• High strength • Non-sag • bonds to a wide variety of substrates
Application	Bonding

LOCTITE® EA E-909™ is designed for very high strength structural bonding especially for dissimilar substrates that will be exposed to a wide range of operating temperatures.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C 1.12 to 1.15^{LMS}

Extrusion Rate, g/sec:

Pressure 0.3 MPa, time seconds, temperature 25 °C:
60 to 100^{LMS}

Flow, ISO 7390, mm ≤12.7^{LMS}

Flash Point - See SDS

TYPICAL CURING PERFORMANCE**Recommended Curing Conditions**

90 minutes @ 100 °C

30 minutes @ 120 °C

20 minutes @ 150 °C

Note:

Curing large assemblies may require additional time to reach the cure temperature.

TYPICAL PROPERTIES OF CURED MATERIAL

Cured for 60 minutes @ 121 °C Tested at temperatures indicated

Physical Properties:

Shore Hardness, ISO 868, Durometer D:

@ 25 °C ≥75^{LMS}

TYPICAL PERFORMANCE OF CURED MATERIAL**Adhesive Properties**

Cured for 20 minutes @ 150 °C, tested @ 21 °C

Lap Shear Strength, ISO 4587:

Steel	N/mm ²	31
	(psi)	(4,550)
Aluminum	N/mm ²	22
	(psi)	(3,180)

"T" Peel Strength, ISO 11339:

Aluminum	N/mm	2.9
	(lb/in)	(26)

GENERAL INFORMATION

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

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

Directions for use:

1. For best performance bond surfaces should be clean and free from grease and other contaminants.
2. Apply LOCTITE® EA E-909™ to both parts to assure sufficient coverage.
3. In most applications only contact pressure is required.
4. Allow product to cure. See recommended curing section.

Loctite Material Specification^{LMS}

LMS dated September 28, 2009. 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: 2 °C 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.

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.

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Reference 0.2