



LOCTITE® EA 937.7 AERO

October 2021

PRODUCT DESCRIPTION

LOCTITE® EA 937.7 AERO provides the following product characteristics:

Technology	Epoxy
Chemical Type	Epoxy
Appearance (Resin)	Light Brown, Amber
Appearance (Hardener)	Clear
Appearance (Mixed)	Light Brown, Amber
Components	Two components - requires mixing
Mix Ratio, by weight - Resin : Hardener	100 : 12
Cure	Room temperature or Heat Cure
Application	Aviation Insulator
Specific Benefits	• Low Density • Good Ablative Material • Room Temperature Cure • Excellent Caulking and Edge-Filling Characteristics

LOCTITE® EA 937.7 AERO is a two part, cork filled potting compound designed to provide good insulative gap filling capabilities for launch vehicle external surfaces. Cure can be accelerated upon exposure to elevated temperatures to increase production throughput.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Part A Properties

Density, g/ml 0.7

Part B Properties

Density, g/ml 1.06

Mixed Properties

Pot life 175 gram mass, @ 25°C (77°F), in water bath, ASTM D2471, minutes 40

TYPICAL CURING PERFORMANCE

Recommended Curing Conditions

72 hours @ 25°C (77°F) or
1 hour @ 71°C (160°F)

This adhesive should be cured to the above minimum recommended cure condition to achieve normal performance.

The above cure profile(s) are guideline recommendation(s). These conditions (time and temperature) may vary based on customers' experience and specific application requirements, as well as customer curing equipment, oven loading and actual oven temperatures.

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties

Shore Hardness, Durometer D 50
ISO 1183 or ASTM D2240

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).

PRECAUTIONARY INFORMATION

As with most epoxy based systems, use this product with adequate ventilation. Do not get in eyes or on skin. Avoid breathing the vapors. Wash thoroughly with soap and water after handling. Empty containers retain product residue and vapors so obey all precautions when handling empty containers.

CAUTION! This material may cause eye and skin irritation or allergic dermatitis. It contains epoxy resins.

WARNING! This material causes eye and skin irritation or allergic dermatitis. It contains amines.

Before using this product refer to container label and HENKEL TECHNOLOGIES MATERIAL SAFETY DATA SHEET for additional precautionary, handling and first aid information.



DIRECTION FOR USE:

1. For high strength structural bonds, remove surface contaminants such as paint, oxide films, oils, dust, mold release agents and all other surface contaminants.
2. Use gloves to minimize skin contact. DO NOT use solvents for cleaning hands.
3. Mixing the individual adhesive component just prior to use is recommended. The temperature of the separate components prior to mixing is not critical, but should be close to room temperature: 25°C (77°F).
4. **Note:** Volume measurement is not recommended for structural applications unless special precautions are taken to assure proper ratios.
5. **Hand Mixing:** Combine Part A & Part B in the correct ratio and mix thoroughly. Be sure to scrape both the sides and bottom of mixing container. Mix for approximately 15 seconds after uniform color is obtained. Heat build-up during or after mixing is normal. Do not mix quantities greater than 0.1 kg as excessive exotherm or heat build up will develop. Mixing smaller amounts will minimize heat build-up.
6. For maximum bond strength apply adhesive evenly to both surfaces to be joined.
7. Application to the substrates should be made promptly. Larger quantities and/or higher temperatures will reduce this working time.
8. Join the adhesive coated surfaces and allow to cure. Higher temperatures will speed up curing.
9. Keep assembled parts from moving during cure. The bond should be allowed to develop full strength before subjecting to any service load.
10. Excessive uncured adhesive can be cleaned up with ketone type solvents.

STORAGE

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

Optimal Storage: 2 to 21°C. Storage greater than 28°C (82 °F) can adversely affect product properties.

Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously recommended. If additional information is required, please contact your local Henkel Representative.

DATA RANGES

The data contained herein may be reported as a typical value. Values are based on actual test data and are verified on a periodic basis.

Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$
 $\text{kV/mm} \times 25.4 = \text{V/mil}$
 $\text{mm} / 25.4 = \text{inches}$
 $\mu\text{m} / 25.4 = \text{mil}$
 $\text{N} \times 0.225 = \text{lb}$
 $\text{N/mm} \times 5.71 = \text{lb/in}$
 $\text{N/mm}^2 \times 145 = \text{psi}$
 $\text{MPa} \times 145 = \text{psi}$

$\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$
 $\text{mPa}\cdot\text{s} = \text{cP}$

Disclaimer

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Reference **N/A**