Technical Data Sheet

LOCTITE® EA 9492 LI

February 2021

Product description

LOCTITE® EA 9492 LI provides the following product characteristics:

Technology	Epoxy
Chemical type (resin)	Epoxy
Chemical type (hardener)	Modified amine
Appearance (resin)	White opaque paste
Appearance (hardener)	Grey, opaque liquid
Appearance (mixed)	White opaque paste
Components	Two part - Resin & Hardener
Mix Ratio, (by weight) resin : hardener	2 : 1
Mix Ratio, (by volume) resin : hardener	100 : 50
Cure	Room temperature cure after mixing
Application	Bonding & potting
Specific benefits	• Very low outgassing • High temperature resistance • Excellent solvent resistance

LOCTITE® EA 9492 LI is a high temperature resistant, two component epoxy adhesive. It is a lower viscosity version of LOCTITE EA 9492 and retains the high performance features of this product. It is a general purpose adhesive that bonds and repairs a wide variety of materials. Fully cured LOCTITE® EA 9492 LI bonds offer superior thermal shock resistance, mechanical, electrical and impact resistant properties.

Typical properties of uncured material

Resin

Specific gravity @ 25°C	1.52 to 1.56
Viscosity, Brookfield - RVT, 25°C , mPa·s (cP):	
Spindle 6, speed 5 rpm,	50,000 to 120,000
Viscosity, DIN 54453, mPa·s (cP):	
Shear rate $10s^{-1}$	45,000
Shear rate $100s^{-1}$	34,000
Flash point - see SDS	

Hardener

Specific gravity @ 25°C	1.5 to 1.58
Viscosity cone plate 4 cm, STM 738, @ 25°C and 40 s^{-1}, mPa·s (cP)	20,000 to 45,000
Flash point - see SDS	

Typical curing performance

Mixed properties

Pot life @ 22°C, minutes 100g mass	10 to 30
Pot life @ 22°C, minutes 100g mass	6

Fixture time

Fixture time is defined as the time to develop a shear strength of 0.1 N/mm².

Fixture time, mixed, @ 22°C, minutes	75
Thin film set (500microns film, RT, on glass strips), minutes	90
Shore D hardness, 7d RT, shore D unit	85
DSC Tg, 2nd scan, °C	95

Typical performance of cured material

Adhesive Properties

Cured for 1 day @ RT + 1 day @ 65°C Aluminum (grit blasted)	>13

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.

Residues of mixed product, before complete cure has occurred, can be washed out from surfaces, clothes, hands by simply washing with warm soapy water.

Material Safety Data Sheet (MSDS) for EA 9492 Part A and EA 9492LI Part B are available.

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.

Directions for use

1. For best performance surfaces for bonding should be clean, dry and free of grease. For high strength structural bonds, special surface treatments can increase the bond strength and durability.
2. To use, resin and hardener must be blended. Product can be applied directly from dual cartridges by dispensing through the mixer head supplied. Discard the first 3 to 5 cm of bead dispensed. Using bulk containers, mix thoroughly by weight or volume in the proportions specified in the Product Description Matrix. For hand mixing, weigh or measure out the desired amount of resin and hardener and mix thoroughly. Mix approximately 15 seconds after uniform color is obtained.
3. It is recommended that this product is not mixed and cured in bulk quantities of greater than 0.5 kg as excessive heat build-up can occur. Mixing smaller quantities will minimize the heat build-up.
4. Apply the adhesive as quickly as possible after mixing to one surface to be joined. For maximum bond strength apply adhesive evenly to both surfaces. Parts should be assembled immediately after mixed adhesive has been applied.
5. For working life please see section 'Typical Properties of Uncured Material'. Higher temperatures and larger quantities will shorten this working time.
6. Excess uncured adhesive can be wiped away with organic solvent (e.g. acetone).
7. Keep the assembled parts from moving during cure. The joint should be allowed to develop full strength before subjecting to any service loads.
8. After use and before adhesive hardens, mixing and application equipment should be cleaned with hot soapy water.

Please, refer to a Henkel Engineer for further information.

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

Optimal Storage: 8°C to 28°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 Henkel representative.

Product specification
The technical data contained herein are intended as reference only and are not considered specifications for the product. Product specifications are located on the Certificate of Analysis or please contact 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.
Temperature/Humidity Ranges: 23°C / 50% RH = 23±2°C / 50±5% RH

Approval and Certificate
Please contact Henkel representative for related approval or certificate of this product.

Conversions
(°C x 1.8) + 32 = °F
kV/mm x 25.4 = V/mil
mm / 25.4 = inches
µm / 25.4 = mil
N x 0.225 = lb
N/mm x 5.71 = lb/in
N/mm² 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

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