Technical Data Sheet

LOCTITE® EA 9536™

Known as Loctite® 9536™
April 2019

PRODUCT DESCRIPTION

LOCTITE® EA 9536™ provides the following product characteristics:

Technology	Epoxy
Appearance	Black tack free film
Cure	Heat cure
Application	Bonding

LOCTITE® EA 9536™ is a 1-component, heat curing and expanding epoxy adhesive, developed for bonding metal substrates. It is designed for dry applications as a solid, flexible and non-tacky film. After application, the material can be cured and expanded at temperatures above 150°C (e.g. during paint cure processes). The applied temperature determines expansion degree and cure time of the material.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 23°C	1 g/mL
Solids Content	>99%
Shore Hardness, ISO 868, Durometer A	40

TYPICAL CURING PERFORMANCE

LOCTITE® EA 9536™ cures when exposed to appropriate levels of heat. Recommended conditions for curing are exposure of the bond line to temperatures at or above 170°C (typically 20 minutes @ 180°C). Rate of cure and final strength will depend on the residence time at the cure temperature so cure schedule should be confirmed with actual production parts and equipment.

TYPICAL PERFORMANCE OF CURED MATERIAL

Adhesive Properties

Cured for 20 minutes @ 170 °C

Lap Shear Strength, ISO 4587:

Aluminum 0.2 mm gap	N/mm²	15.7
	(psi)	(2,280)
Aluminum 2.0 mm gap	N/mm²	4.0
	(psi)	(580)
Steel 0.2 mm gap	N/mm²	16.5
	(psi)	(2,390)
Steel 2.0 mm gap	N/mm²	5.7
	(psi)	(830)

Tensile Strength, ISO 527-2	N/mm²	34
	(psi)	(4,960)
Tensile Modulus, ISO 527-2	N/mm²	3,200
	(psi)	(464,000)

Glass Transition Temperature, ISO 11357-2	120°C
Degree of Expantion	70%

TYPICAL ENVIRONMENTAL RESISTANCE

Cured for 20 minutes @ 170 °C

Lap Shear Strength, ISO 4587:

Heat Aging

After 1,000 hours @ 85 °C / 85% RH

Aluminum 0.2 mm gap	N/mm²	11.9
	(psi)	(1,725)
Aluminum 2.0 mm gap	N/mm²	4.3
	(psi)	(625)
Steel 0.2 mm gap	N/mm²	12.7
	(psi)	(1,840)
Steel 2.0 mm gap	N/mm²	4.9
	(psi)	(710)

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).

Directions for use:

1. For best performance bond surfaces should be clean and free from grease and other contaminants.
2. For high strength structural bonds, special surface treatments can increase the bond strength and durability.
3. LOCTITE® EA 9536™ should be applied onto parts at temperatures of 20 to 35 °C. At higher temperatures the film gets more deformable and tacky. Do not apply LOCTITE® EA 9536™ at temperatures above 80 °C prior to cure cycle.
4. Keep parts from moving during cure. The joint should be allowed to develop full strength before subjecting to any service loads.

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.

The shelf life is 4 months at a temperature of up to 25°C. **If stored below 8°C, the storage time can be Extended to 12 months**. 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

(°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

Reference 5

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