

LOCTITE[®] 7234[™]

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PRODUCT DESCRIPTION

LOCTITE[®] 7234[™] provides the following product characteristics:

Technology	Epoxy
Chemical Type	Epoxy
Appearance (Mixture)	Gray flowable liquid
Components	Two component - requires mixing
Mix Ratio, by volume - Resin : Hardener	2.75 : 1
Mix Ratio, by weight - Resin : Hardener	4.8 : 1
Cure	Room temperature cure after mixing
Application	Coating
Product Benefits	<ul style="list-style-type: none"> • High wear resistance • High chemical resistance • Gloss finish to reduce friction and turbulence • Excellent adhesion
Specific Application	<ul style="list-style-type: none"> • Providing a smooth, protective, abrasion resistant coating • Repairing heat exchangers and condensers

LOCTITE[®] 7234[™] is an ultra smooth, silicone carbide filled epoxy that provides a high gloss, low friction coating designed to protect against abrasion and reduce turbulence. Temperature range -30 to 205 °C. It can be used as smooth, protective coating on metal surfaces or as a low friction top coat over Loctite[®] Nordbak[®] wear resistant compounds. Typical applications are repairing and protecting of heat exchangers, condensers, lining tanks, chutes, valve bodies or pump impellers and housings.

TYPICAL LIQUID PROPERTIES

Coverage 1.2 m² @ 0.5 mm thick/1 kg
(13 ft² @ 0.02 inch thick/2.2 lb)

TYPICAL CURING PERFORMANCE

Working Life @ 25 °C, minutes 30

TYPICAL PROPERTIES OF CURED MATERIAL

Cured for 7 days @ 22 °C

Physical Properties:

Maximum Operating Temperature, °C 205

TYPICAL PERFORMANCE OF CURED MATERIAL

Cured for 7 days @ 22 °C

Dry Service Temperature Resistance, °C 110
(CSA-Z245.20-06/CSA-Z245.21-06 Rating 2)
Wet Service Temperature Resistance, °C 90
(CSA-Z245.20-06/CSA-Z245.21-06 Rating 2)

TYPICAL ENVIRONMENTAL RESISTANCE

Chemical Resistance

Tables below show chemical resistance @ 22°C. Tested on product specimens, immersed up to 5,000 hours @ 22°C in fluids indicated.

Acids

10 % hydrochloric	Short term or intermittent immersion
36 % hydrochloric	Spill, splash with immediate cleanup
10 % sulphuric	Spill, splash with immediate cleanup
10 % nitric	Spill, splash with immediate cleanup
5 % phosphoric	Spill, splash with immediate cleanup

Alkalis

40 % sodium hydroxide	Continuous long term immersion
25 % ammonium hydroxide	Continuous long term immersion
36 % ammonium sulphate	Continuous long term immersion
30 % hydrogen peroxide	Short term or intermittent immersion

Solvents

Deionized Water	Continuous long term immersion
10% Salt Water	Continuous long term immersion
Methanol	Spill, splash with immediate cleanup
Methylethylketone (MEK)	Short term or intermittent immersion
Xylene	Continuous long term immersion

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 Material Safety Data Sheet (MSDS).

Directions for use:

Surface Preparation

Proper surface preparation is critical to the long-term performance of this product. The exact requirements vary with the severity of the application, expected service life, and initial substrate conditions.

- Thoroughly clean and abrade surfaces (grit blast if possible), finally clean with Loctite[®] 7063. The more thorough the degree of surface preparation the better the performance of the application.

Mixing:

- Read the label directions before you begin. When using LOCTITE® 7234™ the entire kit must be mixed at one time. Add all hardener contents to resin container and mix vigorously until uniform in color.

Application:

- Apply fully mixed material to the prepared surface
- LOCTITE® 7234™ should be brushed on 0.5 mm thick for best results
- LOCTITE® 7234™ will bond securely to itself, however, be certain surface is clean, dry and in sound condition with no loose or flaky contaminants present

Cure Cycle

Cure time will depend on ambient temperatures. At 20 °C, curing will occur in 4 to 6 hrs. The lower the temperature, the longer the cure. After compound has hardened, heat the surface to about 65 °C for 30 minutes to ensure full cure and positive bonding

For service above 150 °C, allow 8 hours cure at 23 °C or higher. Then heat for at least 3 hours at 150°C followed by 3 hours at 205°C or peak operating temperature

If heating procedure is impossible before putting the LOCTITE® 7234™ into service, the following method is recommended:

1. Preheat the resin to at least 40 °C. Mix and apply in the manner recommended.
2. Once gelled, heat the applied LOCTITE® 7234™ by waving a gas torch over the surface for at least 1 hour at 40 to 50 °C.
3. Using temperature crayons as indicators, raise the temperature of the coated substrate to between 150 °C and 260 °C, maintain this temperature for at least 2 hours.
4. LOCTITE® 7234™ will then have a high enough degree of cure to begin service. It will continue to cure during normal operating temperatures until a full cure is obtained.

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. Material removed from containers may be contaminated during use. Do not return liquid to original container. 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.

Henkel cannot assume responsibility for product which has been contaminated or stored under conditions other than those recommended. 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

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