

LOCTITE[®] LB 8213

Known as LOCTITE[®] Krytox[®] RFE PFPE Bearing Lubricant
April 2015

PRODUCT DESCRIPTION

LOCTITE[®] LB 8213 provides the following product characteristics:

Technology	Synthetic Grease
Base Oil Type	Perfluoropolyether (PFPE)
Thickener	Polytetrafluoroethylene (PTFE)
Appearance	White to off white buttery grease
Cure	Non-curing
Application	Lubrication
Specific Benefit	<ul style="list-style-type: none"> • High load carrying capabilities • Thermally stable • Chemical resistant • Non-flammable • Prolongs equipment life • Compatible with most plastics • Outperforms petroleum-based grease

LOCTITE[®] LB 8213 is a high performance, synthetic anti-corrosion grease that has excellent lubrication and wear resistance. It provides protection from rusting in ambient conditions as well as high temperatures. Typical applications include corrugated and paper machine bearings, welding machines, linear bearings, oven conveyor bearings, high temperature fans, textile equipment, tenter frames, high speed motors, instrument bearings, sealed for life motors, conveyor systems in glass and aluminum plants, textile calendar roll bearings, brick kiln car bearings, wheel bearing grease, paint plant conveyor bearings, valve lubrication, ventilation fan bearing grease, and emergency generator bearing grease. This product is typically used in applications with an operating range of -26 °C to +260 °C.

This lubricant has been evaluated by the German Federal Institute for Materials testing (Bundesanstalt Fur Materialpruefung, BAM) for reactivity with gaseous oxygen (BAM 8104-4110). Results of BAM 8104-411 conclude that use of this lubricant should only be used in the following oxygen rich (gaseous) environments under the conditions stated below. The liquid oxygen sensitivity test was in accordance to Marshal Space Flight Center Specification 106B and found to have no reaction after 20 trials. Use of this lubricant under conditions other than stated below is not recommended. Each prospective user should test the proposed application thoroughly before repetitive use, using this data as a guide.

Conditions of Temperature and Pressure

For use with Gaseous Oxygen (BAM 8104-411)

Temperature, °C	Maximum Oxygen Pressure, MPa
≤60	11
60 to 100	10
100 to 175	6

Mechanical Impact in Liquid Oxygen (MSFC 106B)

Temperature	Impact Energy, Joules
Ambient	98

TYPICAL PROPERTIES

Specific Gravity @ 25 °C	1.95
Flash Point - See SDS	
Viscosity, base oil, ASTM D445, cSt: @ 20 °C	810
Oil Separation, ASTM D6184, % wt. loss: 30 hours @ 99 °C	3.0
Wear Protection, Scar Diameter, ASTM D2266, mm	0.362
Consistency, ISO 6743-99, NLGI Class	2
Penetration, ISO 2137, 1/10 mm	265 to 290

TYPICAL PERFORMANCE

Physical Properties:

Coefficient of friction, ASTM D 2266	0.11
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GENERAL INFORMATION

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

Handling precautions

1. This product contains sodium nitrite which may slow or inhibit the cure of certain Loctite[®] products. This product should not be used as a lubricant in the presence of strong oxidizers (chlorine, etc.). Contact the Loctite[®] Technical Information Department for more information.

Directions for use:

1. For best results, remove old lubricant and thoroughly clean parts.
2. Lubricate as required to manufacturers specifications.
3. Monitor levels. Lubrication intervals should be extended significantly.

Storage

Store product in the unopened container in a dry location. 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. 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.

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.

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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