



LOCTITE[®] 8103™

January 2008

PRODUCT DESCRIPTION

LOCTITE[®] 8103™ provides the following product characteristics:

Technology	Oil & Grease
Chemical Type	Mineral oil, lithium soap and MoS2
Appearance	Black grease ^{LMS}
Cure	Not applicable
Application	Lubrication

LOCTITE[®] 8103™ is a universal mineral grease containing MoS2 for heavy duty use on moving parts at all speeds. It is used in high stressed joints, plain and roller bearings, splines and socket joints, and slideways subjected to vibration and heavy loads. This grease reduces wear and protects surfaces on equipment subjected to vibration, stop/start and overload conditions. It is used on equipment in quarrying, steel mill, transport, and agricultural industries. This product is typically used in applications with an operating range of -20 °C to +150 °C.

TYPICAL PROPERTIES

Density, DIN EN542 @ 25 °C, g/ml	0.82 to 0.92 ^{LMS}
Flash Point - See MSDS	
Copper Corrosion, ISO 2160	1a
Bomb Oxidation, ASTM D942, N/mm ² drop: 100 hours	<0.055
Consistency, ISO 6743-99, NLGI Class	2
Loading Test - 4 ball, ASTM D2596: Weld Load, N	3,500
Wear, 1 hour / 400 N, mm	0.6
Penetration, ISO 2137, 1/10mm	265 to 295 ^{LMS}
EMCOR Test, DIN 51802	0
Drop Point, ISO 2176, °C	>170 ^{LMS}
DN Factor (Ndm), max.	500,000

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a lubricant for chlorine or other strong oxidizing materials.

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

Directions for use

1. Apply to clean parts where possible, as conventional grease, by means of brush, spatula or grease gun. LOCTITE[®] 8103™ may be used in automatic lubrication systems.
2. LOCTITE[®] cleaners 7063™ or 7070™ may be used to remove grease residues from nipples and lubricated parts.
3. Follow manufacturer's recommendation for lubrication of bearings (e.g. quantity, frequency, etc.).
4. Avoid excessive greasing. Other grease residues may not be compatible with LOCTITE[®] 8103™.

Loctite Material Specification^{LMS}

LMS dated April 22, 2004. Test reports for each batch are available for the indicated properties. LMS test reports include selected QC test parameters considered appropriate to specifications for customer use. Additionally, comprehensive controls are in place to assure product quality and consistency. Special customer specification requirements may be coordinated through Henkel Quality.

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.

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/mm ² 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

Note

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

Trademark usage

Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 0.1