Technical Data Sheet

LOCTITE® LB C-200

Known as Loctite® C-200™
July 2013

PRODUCT DESCRIPTION

LOCTITE® LB C-200 provides the following product characteristics:

Technology	Molybdenum-disulfide based
Appearance (uncured)	Dark gray smooth paste[LMS]
Components	One component - requires no mixing
Cure	Air dry with optional heat cure
Application	Lubrication
Specific Benefit	• High temperature • Heavy-duty static loads • Will not attract dirt or dust

LOCTITE® LB C-200 is a molybdenum-disulfide based solid film lubricant. It is used by manufacturers of military and commercial jet engines. In soft paste form, this product brushes on easily. Typical applications include production, aerospace, automotive, heavy equipment, and electrical. This product is typically used in sliding friction at an operating range of -29 °C to +398 °C. For anti-seize lubrication, LOCTITE® LB C-200 functions from -29 °C to +1315 °C.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Specific Gravity @ 25 °C	1.3 to 1.6[LMS]
Density, DIN EN542 @ 25 °C, g/ml	1.44
Flash Point - See MSDS	
Penetration, ISO 2137, unworked, 1/10 mm	330 to 390[LMS]
Coverage, 0.0177 mm ()	55.7 m² per 3.78 l

TYPICAL CURING PERFORMANCE

Any of the following cure schedules will cause LOCTITE® LB C-200 to thermoset, making it fluid and solvent resistant.

Cure Schedule

@ 260 to 315 °C, 30 minutes
@ 232 °C, 60 minutes
@ 204 °C, 2 hours

TYPICAL PERFORMANCE

An anti-seize lubricant used on a bolt helps to develop greater clamp load for the same torque compared to an unlubricated bolt. An additional benefit is greater uniformity in clamp load among a series of bolts. The relationship between torque and clamp load is expressed in the following equation:

T = K x F x D

T = Torque (N·m, lb.in, lb.ft)
K = Torque coefficient or nut factor, determine experimentally
F = Clamp load (N, lb.)
D = Nominal diameter of bolt (mm, in.)

Torque coefficient, k:

12.7 mm steel bolts (grade 8) and nuts (grade 5)	0.13
12.7 mm steel bolts (grade 8) and nuts (grade 5), solvent cleaned, not lubricated	0.27

TYPICAL PROPERTIES OF CURED MATERIAL

Physical Properties:

Melting Point, °C	≥65[LMS]
Draw Down - #2 Draw down on Steel	No flaking when scratched with a blunt object[LMS]

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).

Surface Treatments Compatible With Lubricant

Aluminum and Magnesium	Anodize coatings
Carbon Steel	Phosphate coatings
Stainless Steel	Passivated with acid and dichromate
Titanium	Phosphate fluoride treatment

Directions for use:

1. May be applied by brushing, dipping or spraying directly to clean metal surfaces.
2. Prior surface treatments -- common metal protecting conversion coatings -- can be used to enhance corrosion resistance and wear life.

Loctite	Material	Specification[LMS]

LMS dated September 13, 1999. 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/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

Disclaimer

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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Reference 0.1