MOLYKOTE® BR-2 Plus High Performance Grease

High-performance grease with solid lubricants for metal/metal combinations involving slow to fast movements, particularly with medium to high loads

Features & benefits

- High load-carrying capacity
- Suitable for long-term lubrication
- Good oxidation resistance
- Emergency running properties, i.e. in the case of mixed friction providing of wear protection by solid lubricants and EP additives
- Good protection against scarring (false Brinelling)
- Good water-washout resistance
- Good corrosion protection
- Good protection against fretting corrosion

Composition

- Mineral oil
- Lithium soap
- Solid lubricants
- EP additive
- Corrosion inhibitor

Applications

Used successfully on roller bearings, plain bearings, sliding guides, roller guides, ball-and-socket joints, splined shafts and threaded spindles.

Description

MOLYKOTE® BR-2 Plus High Performance Grease is a lithium-soap-thickened, mineral oil grease fortified with MoS_2 and other solid lubricants. It is a heavy duty, extreme pressure lubricant with high load-carrying capability at moderate to high speeds.

How to use

Clean points of contact. Apply in same way as lubricating greases, using brush, spatula, grease-gun or automatic lubricating device. Suitable for delivery by central lubricating system.

Typical properties

Specification writers: These values are not intended for use in preparing specifications. Please contact your local MOLYKOTE® sales representative prior to writing specifications on this product.

Standard[1]	Test	Unit	Result
	Color		Black
Consistency, density, viscosity			
DIN 51 818	NLGI consistency class		2
ISO 2137	Worked penetration	mm/10	265-295
ISO 2811	Density at 20°C	g/ml	0.89
DIN 51 562	Base oil viscosity at 40°C[2]	mm^2/s	114
Temperature			
	Service temperature	°C	-30 to 130, 150 for short periods
ISO 2176	Drop point	°C	≥175
ASTM D1478-80	Low-temperature torque test at -20°C		
	Initial break-away torque	Nm	151×10^{-3}
	Torque after 20 minutes running time	Nm	59×10^{-3}
Load-carrying capacity, wear protection, service life			
DIN 51 350 pt.4	Four-ball tester (VKA) Weld Load	N	3,600
DIN 51 350 pt.5	Wear scar under 800 N load	mm	0.8
	Almen-Wieland machine OK load	N	15,500
	Frictional force with OK load	N	3,150
DIN 51821-02-B	FAG rolling element bearing tester equipment, FE 9, 1,500/6,000/140°C, F_{50}}	h	195

[1]DIN: Deutsche Industrie Norm. ISO: International Standardization Organization. ASTM: American Society for Testing and Materials.
[2]Calculated viscosity value of base oil mixture.

Continues on next page

Typical properties (continued)

Specification writers: These values are not intended for use in preparing specifications. Please contact your local MOLYKOTE® sales representative prior to writing specifications on this product.

Standard[1]	Test	Unit	Result
Speed			
	DN value[3]	mm/min	450,000
Resistance			
DIN 51 808	Oxidation resistance, pressure drop 100 hr, 99°C	bar	0.1
Corrosion protection			
DIN 51 802	SKF-Emcor method		0
	Oil separation – evaporation		
	Oil separation, 7 days, 40°C	%	3.8

[1]DIN: Deutsche Industrie Norm. ISO: International Standardization Organization. ASTM: American Society for Testing and Materials.
[3]DN values are calculated approximations and will vary widely with temperature, load and bearing type.

Handling precautions

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION.

Usable life and storage

When stored at or below 20°C in the original unopened containers, this product has a usable life of 60 months from the date of production.

Packaging

This product is available in different standard container sizes. Detailed container size information should be obtained from your nearest MOLYKOTE® sales office or MOLYKOTE® distributor.

DuPont™, the DuPont Oval Logo, and all trademarks and service marks denoted with ™, ℠ or ® are owned by affiliates of DuPont de Nemours, Inc. unless otherwise noted.
© 1997-2019 DuPont.

The information set forth herein is furnished free of charge and is based on technical data that DuPont believes to be reliable and falls within the normal range of properties. It is intended for use by persons having technical skill, at their own discretion and risk. This data should not be used to establish specification limits nor used alone as the basis of design. Handling precaution information is given with the understanding that those using it will satisfy themselves that their particular conditions of use present no health or safety hazards. Since conditions of product use and disposal are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information. As with any product, evaluation under end use conditions prior to specification is essential. Nothing herein is to be taken as a license to operate or a recommendation to infringe on patents.

Form No. 71-0241C-01 (07/19) AGP16093