

# 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<sub>2</sub> 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 <sup>(1)</sup>	Test	Unit	Result
	Color		Black
<b>Consistency, density, viscosity</b>			
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 <sup>(2)</sup>	mm <sup>2</sup> /s	114
<b>Temperature</b>			
	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 x 10 <sup>-3</sup>
	Torque after 20 minutes running time	Nm	59 x 10 <sup>-3</sup>
<b>Load-carrying capacity, wear protection, service life</b>			
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 <sub>50</sub> }	h	195

<sup>(1)</sup>DIN: Deutsche Industrie Norm. ISO: International Standardization Organization. ASTM: American Society for Testing and Materials.

<sup>(2)</sup>Calculated viscosity value of base oil mixture.

## Typical properties (continued)

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

<sup>(1)</sup>DIN: Deutsche Industrie Norm. ISO: International Standardization Organization. ASTM: American Society for Testing and Materials.

<sup>(3)</sup>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.

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