Information About Dow Corning® BR2-Plus Multi-Purpose E.P. Grease

Type

Lithium-soap grease with special additives including MoS₂

Physical Form

NLGI #2 grease

Special Properties

Suitable for use over a wide temperature range; good resistance to oxidation and hot and cold water; good corrosioninhibiting properties

Primary Uses

Can be used wherever grease lubrication is normally applied; multi-purpose as well as extremepressure applications

DESCRIPTION

Dow Corning® BR2-Plus Multi-Purpose E.P. Grease is a high-quality, lithium soap grease that contains an optimum percentage of solid lubricants, including MoS₂, in combination with other highly effective extreme-pressure additives.

It has a wide range of applications and is well-suited for plain and antifriction bearings as well as other grease-lubricated machine elements. It performs equally well under high loads and high speeds or under low speeds and reciprocating motion.

Under load, a boundary lubricating film containing MoS₂ is deposited from the grease to the sliding surfaces so that emergency lubrication is available.

Even at very high surface pressures in the range of boundary lubrication, *Dow Corning* BR2-Plus Multi-Purpose E.P. Grease reduces the coefficient of friction and metal-to-metal contact, thus minimizing wear. It markedly improves running-in conditions through reduced friction and wear.

Dow Corning BR2-Plus Multi-Purpose E.P. Grease provides:

- · Reduced wear
- Emergency lubrication
- Higher operational reliability
- Extended lubrication intervals even under high loads and difficult lubricating conditions

Dow Corning BR2-Plus Multi-Purpose E.P. Grease is suitable for use over a wide temperature range. It is resistant to oxidation as well as hot and cold water. Additionally, this material has good corrosion-inhibiting properties and good pumpability in automatic dispensing equipment and centralized lubrication systems regardless of feedline length.

USES

Dow Corning BR2-Plus Multi-Purpose E.P. Grease can be used wherever grease lubrication is normally applied within its recommended operating temperature range. Typical applications include:

- All types of antifriction bearings
- Plain bearings and guides
- Joints and splined shafts
- Threaded spindles and small gear units at low speeds
- Bearings subject to severe impact loads or exposed to extreme atmospheric conditions
- Chassis lubrication on motor vehicles
- · Wheel bearings

For lubrication under exceptionally severe operating conditions, chemical influences or temperature extremes, other *Dow Corning*[®] greases are recommended. Please contact your local Dow Corning representative for additional information.

TYPICAL PROPERTIES

These values are not intended for use in preparing specifications.

	Color	Black
	Grease Base	Lithium soap/mineral oil
	Solid Lubricant Content, percent	3
ASTM D217	Penetration, mm/10 (W-60)	
	Consistency, NLGI Number	2
	Base Oil Viscosity at 100°F (38°C), SUS	725
ASTM D 566	Dropping Point, °F (°C)	390 (200)
	Operating Temperature Range,	
	approximate, °F (°C)	22 to 266 (-30 to 130)
ASTM D 1264	Water Washout, percent	2.25

Specification Writers: Please obtain a copy of the Dow Corning Sales Specification for this product and use it as a basis for your specifications. It may be obtained from any Dow Corning Sales Office, or from Dow Corning Customer Service in Midland, MI. Call (517) 496-6000.

Typical Performance Data

ASTM D 2509	Four Ball Test Weld Load, N
ASTM D 2266	Four Ball Wear Scar Diameter, 1 hour/40 kg/167°F), mm 0.46
	Maximum DN Value ¹ , bore size in mm × rpm
Fed Std 791	Bleed at 100°C (212°F), percent
Method 321.1	Evaporation at 100°C (212°F), percent
	Corrosion Test, Emcor

¹Maximum DN values are approximations and can vary widely with temperature, load and bearing type.

LIMITATIONS

Not for medical use.

HOW TO USE

Apply *Dow Corning* BR2-Plus Multi-Purpose E.P. Grease like any other grease.

The internal spaces of antifriction bearings should be filled with grease. However, the remaining space in the housing should be filled only about half full with grease. In bearings rotating at low speed, the housing can be fully filled. (Follow antifriction bearing manufacturer's instructions.)

With plain bearings, grease should be pumped in until all the old grease is expelled from the bearing. (*Dow Corning* BR2-Plus Multi-Purpose E.P. Grease should not be mixed with greases of a different soap base.)

SHIPPING LIMITATIONSNone.

STORAGE AND SHELF LIFE

Dow Corning BR2-Plus Multi-Purpose E.P. Grease has a shelf life of

60 months from date of manufacture.

PACKAGING

Dow Corning BR2-Plus Multi-Purpose E.P. Grease is supplied in 14-oz (397-g) tubs, 14.1-fl oz (417-mL) cartridges, 35-lb (15.9-kg) pails and 120- and 400-lb (54.4- and 181.4-kg) drums, net weight.

SAFE HANDLING INFORMATION PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PROD-UCT AND MATERIAL SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE MATERIAL SAFETY DATA SHEET IS AVAILABLE FROM YOUR DOW CORNING REPRESENTATIVE, OR DISTRIBUTOR, OR BY WRITING TO DOW CORNING CUSTOMER SERVICE, OR BY CALLING (517) 496-6000.

LIMITED WARRANTY -

PLEASE READ CAREFULLY

Dow Corning believes that the information in this publication is an accurate description of the typical characteristics and/or uses of the product or products, but it is your responsibility to thoroughly test the product in your specific application to determine its performance, efficacy and safety. Suggestions of uses should not be taken as inducements to infringe any particular patent.

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Printed in USA AGP3515 Form No. 71-420E-98

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