

PETRONAS GREASE Li EP 2

Extreme Pressure Lithium Grease

PETRONAS Grease Li EP 2 is an extreme pressure Lithium grease specially developed for multipurpose applications, lubrication of both plain and anti-friction bearings even where severe or shock loads are experienced.

Formulated with selected mineral base oils enhanced with Lithium 12-hydroxystearate soap, advanced extreme pressure, anti-oxidant, anti-rust and corrosion inhibitors. PETRONAS Grease Li EP 2 provides high load carrying capabilities, low temperature dispensing and resistance to water wash-out.

PETRONAS Grease Li EP 2 meets or exceeds key industrial specifications.

Applications

PETRONAS Grease Li EP 2 is recommended for use in:

- multipurpose applications
- lubrication of both plain and anti-friction bearings even where severe or shock loads are experienced
- pins and bushes, geared couplings at normal speeds
- vibrating shafts and sliding mechanisms under normal operating conditions

Note: PETRONAS Grease Li EP 2 is recommended for operating temperature range of -30° C to $+120^{\circ}$ C (Max. $+130^{\circ}$ C).

Features and Benefits

Features	Benefits		
Very good pumpability	Very good performance where low temperature performance is required		
High load carrying capacity	Contain special EP additives which enable the grease to withstand heavy shock loads without losing the lubricant film		
High rust & corrosion protection	Protect bearing surfaces against corrosion, even when the grease is contaminated with water		
High resistance to water wash-out	Equipment protection and good lubrication even in presence of water		
Mechanical stability	A highly stable grease with little or no change to consistency when worked in the lubrication of wheel bearings.		
High thermal and oxidation stability	Has good oxidation resistance and can withstand high operating temperatures without hardening or forming bearing deposits		

ALL RIGHTS RESERVED. THIS PRODUCT DATA SHEET (INCLUDING NAME, INFORMATION, LOGOS, IMAGES, PICTURES AND ICONS) WHICH RELATES OR REFERS TO PETRONAS LUBRICANTS INTERNATIONAL (PLI) IS THE SOLE AND ABSOLUTE PROPERTY OF PLI AND/OR ITS HOLDING COMPANY AND SHALL BE TREATED AS PRIVATE AND CONFIDENTIAL. NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR ANY MEANS (ELECTRONIC, MECHANICAL, RECORDING OR OTHERWISE) WITHOUT THE PERMISSION OF PLI AND/OR ITS HOLDING COMPANY.

PETRONAS GREASE Li EP 2

Extreme Pressure Lithium Grease

Typical Properties

Characteristic	Method	Specification	Li EP 2
Thickener Type	_	Lithium	Lithium
NLGI	ASTM D217	2	2
Color	Visual	Brown	Brown
Worked Penetration, mm/10	ASTM D217	265 - 295	280
Worked Penetration 100.000x, Penetration Change, mm/10, Max.	ASTM D217	+25	+15
Oil Separation, Mass %, Max.	ASTM D1742	5	3
Dropping Point, °C, Min.	ASTM D2265	180	190
Four Ball Wear, mm, Max.	ASTM D2266	0,50	0,50
Four Ball EP Weld Point, Min.	ASTM D2596	250	250
SKF R2F B at 120°C	SKF	Pass	Pass
Roll Stability, % of Penetration Change, Max.	ASTM D1831	15	10
Wheel Bearing Leakage, grams, Max.	ASTM D4290	8	6
Water resistance at 90°C, Max.	DIN 51807:1	3	1
Water Washout at 79°C, %, Max.	ASTM D1264	10	6
Flow Pressure at -30°C, mbar, Max.	DIN 51805 mod	1400	<1400
Rust Protection, rating	ASTM D1743	Pass	Pass
Emcor Test (Dist. Water), Max.	ASTM D6138	0-0	0-0
Base Oil Viscosity @40°C, cSt	ASTM D445	180 - 200	190

All technical data are provided for reference only / SS is available upon request including quality control limits

Performance Levels

- DIN 51502 KP2K-30
- ISO 12924 L-XC(F)CHB2

ALL RIGHTS RESERVED. THIS PRODUCT DATA SHEET (INCLUDING NAME, INFORMATION, LOGOS, IMAGES, PICTURES AND ICONS) WHICH RELATES OR REFERS TO PETRONAS LUBRICANTS INTERNATIONAL (PLI) IS THE SOLE AND ABSOLUTE PROPERTY OF PLI AND/OR ITS HOLDING COMPANY AND SHALL BE TREATED AS PRIVATE AND CONFIDENTIAL. NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR ANY MEANS (ELECTRONIC, MECHANICAL, RECORDING OR OTHERWISE) WITHOUT THE PERMISSION OF PLI AND/OR ITS HOLDING COMPANY.



PETRONAS GREASE LI EP 2

Extreme Pressure Lithium Grease

Health, Safety and Environment

This product is unlikely to present any significant health and safety hazards when used in the recommended application. Avoid contact with skin. Wash immediately with soap and water after skin contact. Do not discharge into drains, soil or water.

For further detail regarding storage, safe handling, and disposal of product, please refer to product SDS or contact us at: <u>www.pli-petronas.com</u>.

Important Note

The word PETRONAS, the PETRONAS logo and such other related trademarks and/or marks used herein are trademarks or registered trademarks of PETRONAS Lubricants International Sdn. Bhd. ("PLISB"), or its subsidiaries or related Holding Corporation under license unless indicated otherwise. The PLI Documents and the information contained herein are believed to be accurate as of the date of printing. PLISB makes no express or implied representation or warranties as to its accuracy or completeness or information in or any transaction performed. The PLI Documents and information provided are based on standard tests under laboratory conditions and is given only as a guide. Users are advised to ensure that they refer to the latest version of these PLI Documents. It is the responsibility of the users to evaluate and use products safely, to assess suitability for the intended application and to comply with all applicable laws and regulations imposed by the respective local authorities.

Safety Data Sheets are available for all our products and should only be consulted for appropriate information regarding storage, safe handling and disposal of the product. No responsibility shall be taken by either PLISB or its subsidiaries and related holding corporation for any loss or injury or any direct, indirect, special, exemplary, consequential damages or any damages whatsoever, whether in action of contract, negligence or other tortuous action, in connection with or resulting from abnormal use of the materials and/or information, from any failure to adhere to recommendations, or from hazards inherent in the nature of the materials and/or information. All products, services and information supplied are under our standard conditions of sale. Please consult with any of our local representatives in the event you require any further information.

ALL RIGHTS RESERVED. THIS PRODUCT DATA SHEET (INCLUDING NAME, INFORMATION, LOGOS, IMAGES, PICTURES AND ICONS) WHICH RELATES OR REFERS TO PETRONAS LUBRICANTS INTERNATIONAL (PLI) IS THE SOLE AND ABSOLUTE PROPERTY OF PLI AND/OR ITS HOLDING COMPANY AND SHALL BE TREATED AS PRIVATE AND CONFIDENTIAL. NO PART OF THIS DOCUMENT MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR ANY MEANS (ELECTRONIC, MECHANICAL, RECORDING OR OTHERWISE) WITHOUT THE PERMISSION OF PLI AND/OR ITS HOLDING COMPANY.