Revision Date: 28.08.2019



PETRONAS GREASE LiCa MG HL

Extreme Pressure Lithium Calcium Grease

PETRONAS Grease LiCa MG HL is an extreme pressure Lithium Calcium grease with dual solid additives and film thickening polymers to improve boundary lubrication.

Formulated with selected mineral base oils enhanced with Lithium calcium soap, advanced extreme pressure, anti-oxidant, anti-rust and corrosion inhibitor additives. PETRONAS Grease LiCa MG HL provides excellent load carrying protection, water washout and spray off resistance in applications operating in wet environments and elevated temperatures.

PETRONAS Grease LiCa MG HL meets or exceeds key industrial specifications.

Applications

PETRONAS Grease LiCa MG HL is recommended for use in:

- chassis grease and it is particularly suitable for off-road applications in civil engineering pin and bush lubrication, the agriculture sector and construction vehicles plus equipment
- slow speed heavy duty industrial plain and anti-friction bearings
- applications involving oscillating or limited relative motion, where fretting is likely to occur
- constant velocity joints, machine tools, vibrating shafts and sliding mechanisms

Note: PETRONAS Grease LiCa MG HL is recommended for operating temperature range of -20°C to +120°C (Max. +130°C).

Features and Benefits

| Features | Benefits | | | |
|--------------------------------------|---|--|--|--|
| Excellent pumpability | Excellent performance where low temperature performance is required | | | |
| Excellent 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 | | | |
| High friction reduction capabilities | Dual solid lubricants reduce friction and assists energy savings | | | |

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Typical Properties

| Characteristic | Method | Specification | LiCa MG HL |
|--|---------------|--------------------|--------------------|
| Thickener Type | - | Lithium Calcium | Lithium Calcium |
| NLGI | ASTM D217 | 2 | 2 |
| Color | Visual | Black | Black |
| Worked Penetration, mm/10 | ASTM D217 | 265 - 295 | 280 |
| Worked Penetration 100.000x, Penetration Change, mm/10, Max. | ASTM D217 | +30 | +25 |
| Oil Separation, Mass %, Max. | ASTM D1742 | 6 | 5 |
| Dropping Point, °C, Min. | ASTM D2265 | 180 | 190 |
| Four Ball Wear, mm, Max. | ASTM D2266 | 0,50 | 0,40 |
| Four Ball EP Weld Point, Min. | ASTM D2596 | 400 | 400 |
| SKF R2F B at 120°C | SKF | Pass | Pass |
| Flow Pressure at -20°C, mbar, Max. | DIN 51805 mod | 1400 | <1400 |
| Roll Stability, % of Penetration Change, Max. | ASTM D1831 | 10 | 10 |
| Water resistance at 90°C, Max. | DIN 51807:1 | 3 | 1 |
| Water Washout at 79°C, %, Max. | ASTM D1264 | 10 | 6 |
| Rust Protection, rating | ASTM D1743 | Pass | Pass |
| Emcor Test (Dist. Water), Max. | ASTM D6138 | 1-1 | 0-0 |
| Base Oil Viscosity @40°C, cSt | ASTM D445 | 660 - 680 | 670 |
| Molybdenum Disulfide, Mass % | - | 2 | 2 |
| Graphite, Mass % | - | 3 | 3 |

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

Performance Levels

- DIN 51502 KPF2K-20
- ISO 12924 L-XB(F)CHB2

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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: www.pli-petronas.com.

Important Note

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