

## **Extreme Pressure Lithium Complex Grease**

PETRONAS Grease LiX EP 2/170 is an extreme pressure Lithium complex grease specifically developed for commercial vehicle applications and a wide variety of industry applications. Formulated with selected mineral base oil enhanced with Lithium Complex soap, advanced extreme pressure, anti-oxidant, anti-rust and corrosion inhibitor additives, PETRONAS Grease LiX EP 2/170 provides excellent load carrying capabilities and wear protection, high resistance to water wash-out and rust inhibition, even at elevated temperatures.

PETRONAS Grease LiX EP 2/170 meet or exceeds key industrial specifications.

#### Applications

PETRONAS Grease LiX EP 2/170 is recommended for use in:

- general purpose applications for automotive commercial transport vehicles and chassis lubrication. It is particularly suitable for lubricating of roller and friction bearings under extreme pressure load at high temperature
- wheel bearing and prop shaft lubrication of commercial / utility vehicles and passenger motor cars
- industrial and farm equipment components

Note: PETRONAS Grease LiX EP 2/170 is recommended for operating temperature range of -20°C to +140°C (Max. +180°C).



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### Features and Benefits

| Features                                   | Benefits  |  |  |
|--|---|--|--|
| High pumpability                           | High performance where low temperature performance is required  |  |  |
| Excellent adhesive and cohesive properties | Excellent grease tenacity which helps reduce leakage and extend re-lubrication intervals, reducing maintenance costs            |  |  |
| Excellent load carrying capacity           | Contains special additives which enables the grease to withstand heavy loads without loss of the lubricant film                 |  |  |
| High rust & corrosion protection           | Protects bearing surfaces against rust and 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 thermal and oxidation stability       | Has good oxidation resistance and can withstand high<br>operating temperatures without hardening or forming<br>bearing deposits |  |  |
| Mechanical stability                       | A highly stable grease with little or no change to consistency when worked in the lubrication of bearings                       |  |  |

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### **Typical Properties**

| Characteristic   | Method        | Specification      | LiX EP 2/170       |
|--|---------------|--------------------|--------------------|
| Thickener Type   | -             | Lithium<br>Complex | Lithium<br>Complex |
| NLGI   | ASTM D217     | 2                  | 2                  |
| Color  | Visual        | Green              | Green              |
| Worked Penetration, mm/10                                    | ASTM D217     | 265 - 295          | 280                |
| Worked Penetration 100.000x, Penetration Change, mm/10, Max. | ASTM D217     | +20                | +15                |
| Oil Separation, Mass %, Max.                                 | ASTM D1742    | 5                  | 3                  |
| Dropping Point, °C, Min.                                     | ASTM D2265    | 260                | 290                |
| Four Ball Wear, mm, Max.                                     | ASTM D2266    | 0,50               | 0,40               |
| Four Ball EP Weld Point, Min.                                | ASTM D2596    | 250                | 250                |
| SKF R2F B at 140°C   | SKF           | Pass               | Pass               |
| Flow Pressure at -20°C, mbar, Max.                           | DIN 51805 mod | 1400               | <1400              |
| Roll Stability, % of Penetration Change, Max.                | ASTM D1831    | 15                 | 10                 |
| Wheel Bearing Leakage, grams, Max.                           | ASTM D4290    | 10                 | 5                  |
| Water Washout at 38°C, %, Max.                               | ASTM D1264    | 8                  | 6                  |
| Rust Protection, rating                                      | ASTM D1743    | Pass               | Pass               |
| Water resistance at 90°C, Max.                               | DIN 51807:1   | 1                  | 0                  |
| Copper Corrosion, Max.                                       | ASTM D4048    | 1                  | 1a                 |
| Emcor Test (Salt Water), rating, Max.                        | ASTM D6138    | 2-2                | 0-0                |
| Base Oil Viscosity @40°C, cSt                                | ASTM D445     | 180 - 230          | 183                |

All technical data are provided for reference only and all specification based on ASTM D4950 / SS is available upon request including quality control limits

#### Performance Levels

- DIN 51502 KP2N-20
- GC-LB
- ISO 12924 L-XB(F)DIB2

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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: <u>www.pli-petronas.com</u>.

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