

# PETRONAS GREASE CaSX

## Calcium Sulphonate Complex Grease

PETRONAS Grease CaSX is a Calcium Sulphonate complex grease specially developed for industrial, marine and off-road applications.

Formulated with mineral base oils enhanced with Calcium Sulphonate complex soap, anti-wear, antioxidant, anti-rust and corrosion inhibitor additives. PETRONAS Grease CaSX provides excellent load carrying capacity making it suitable for heavily loaded applications. Excellent mechanical stability, corrosion protection and water resistance which are important in wet and corrosive environments.

PETRONAS Grease CaSX meet or exceed key industrial specifications.

### Applications

PETRONAS Grease CaSX are recommended for use in:

- industrial, marine and off-road applications
- most heavy-duty bearing applications including large plain and anti-friction bearings and other mechanisms requiring a high temperature NLGI 2 grease such as slides, cams etc.
- application that requiring multi-purpose grease and excels in Marine applications

Note: PETRONAS Grease CaSX is recommended for operating temperature range of -30°C to +140°C (Max. +180°C).

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### Features and Benefits

| Features                                  | Benefits                                                                                                                       |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Excellent load carrying capacity          | Contains special EP additives which enables the grease to withstand heavy loads without losing the lubricant film              |
| Excellent rust & corrosion protection     | Protects bearing surfaces against rust and corrosion, even when the grease is contaminated with water                          |
| Excellent thermal and oxidation stability | Has excellent oxidation resistance and can withstand high operating temperatures without hardening or forming bearing deposits |
| High pumpability                          | High performance where low temperature performance is required                                                                 |
| High resistance to water wash-out         | Protects equipment as the grease is not easily removed in presence of water                                                    |
| High adhesive and cohesive properties     | High grease tenacity which helps reduce leakage and extend re-lubrication intervals, reducing maintenance costs                |
| Mechanical stability                      | A highly stable grease with little or no change to consistency when worked in the lubrication of bearings.                     |

**Technical Data Sheet**

Revision Date: 08.06.2020

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### Typical Properties

| Characteristic                                            | Method        | Specification              | CaSX                       |
|-----------------------------------------------------------|---------------|----------------------------|----------------------------|
| Thickener Type                                            | -             | Calcium Sulphonate Complex | Calcium Sulphonate Complex |
| NLGI                                                      | ASTM D217     | 2                          | 2                          |
| Color                                                     | Visual        | Brown                      | Brown                      |
| Worked Penetration, mm/10                                 | ASTM D217     | 265 - 295                  | 280                        |
| Worked Penetration 100.000x,<br>Penetration Change, mm/10 | ASTM D217     | ±10                        | +8                         |
| Oil Separation, Mass %                                    | ASTM D1742    | Max. 5                     | 0                          |
| Dropping Point, °C                                        | ASTM D2265    | Min. 300                   | >309                       |
| Four Ball Wear, mm                                        | ASTM D2266    | Max. 0,40                  | 0,40                       |
| Four Ball EP Weld Point, kgf                              | ASTM D2596    | Min. 620                   | 620                        |
| Roll Stability, % of Penetration<br>Change                | ASTM D1831    | ±10                        | 5                          |
| Wheel Bearing Leakage, grams                              | ASTM D4290    | Max. 8                     | 3                          |
| Water Washout at 79°C, %                                  | ASTM D1264    | Max. 10                    | 0                          |
| Water Resistance at 90°C, %                               | DIN 51807:1   | Max. 3                     | 1                          |
| Water Spray Off, %                                        | ASTM D4049    | Max. 50                    | 40                         |
| Rust Protection, rating                                   | ASTM D1743    | Pass                       | Pass                       |
| Emcor Test (Salt Water)                                   | ASTM D6138    | Max. 1-1                   | 0-0                        |
| Flow Pressure at -30°C, mbar                              | DIN 51805 mod | Max. 1400                  | <1400                      |
| SKF R2F at 140°C                                          | SKF           | Pass                       | Pass                       |
| Base Oil Viscosity @40°C, cSt                             | ASTM D445     | 280 - 300                  | 290                        |

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

### Performance Levels

- DIN 51502 KP2N-30
- ISO 12924 L-XC(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: [www.pli-petronas.com](http://www.pli-petronas.com).

### Important Note

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