

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, anti-oxidant, 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 $+140^{\circ}$ C (Max. $+180^{\circ}$ C).

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

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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, 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	ASTM D2596	Min. 620	620
Roll Stability, % of Penetration 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, mbar	DIN 51805 mod	Max. 1400 at -30°C	<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: <u>www.pli-petronas.com</u>.

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