PETRONAS

Revision Bate: 17.01.2020

# PETRONAS GREASE CaSX 1.5/460

## **Calcium Sulphonate Complex Grease**

PETRONAS Grease CaSX 1.5/460 is a Calcium Sulphonate complex grease specially developed for industrial, steel mills, paper machine, 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 1.5/460 provide 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 1.5/460 meet or exceed key industrial specifications.

#### **Applications**

PETRONAS Grease CaSX 1.5/460 are recommended for use in:

- high temperatures and loads of steel mills (continues casting / rolling section) and paper machines
- 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 1/2 grease such as slides, cams etc
- application that requiring multi-purpose grease and excels in Marine applications

Note: PETRONAS Grease CaSX 1.5/460 is recommended for operating temperature range of  $-20^{\circ}\text{C}$  to  $+140^{\circ}\text{C}$  (Max.  $+180^{\circ}\text{C}$ ).



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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.		

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## **Calcium Sulphonate Complex Grease**

### **Typical Properties**

Characteristic	Method	Specification	CaSX 1.5/460
Thickener Type	_	Calcium Sulphonate Complex	Calcium Sulphonate Complex
NLGI	ASTM D217	1/2	1/2
Color	Visual	Brown	Brown
Worked Penetration, mm/10	ASTM D217	290 - 320	305
Worked Penetration 100.000x, Penetration Change, mm/10	ASTM D217	±10	+7
Oil Separation, Mass %	ASTM D1742	Max. 5	0
Dropping Point, °C	ASTM D2265	Min. 260	280
Four Ball Wear, mm	ASTM D2266	Max. 0,50	0,43
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	4
Water Washout at 79°C, %	ASTM D1264	Max. 10	2
Water Resistance at 90°C, %	DIN 51807:1	Max. 3	1
Water Spray Off, %	ASTM D4049	Max. 50	30
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 -20°C	<1400
SKF R2F at 140°C	SKF	Pass	Pass
Base Oil Viscosity @40°C, cSt	ASTM D445	440 - 460	450

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

#### Performance Levels

- DIN 51502 KP1.5N-20
- ISO 12924 L-XB(F)DIB1.5

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### **Calcium Sulphonate Complex 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: <a href="https://www.pli-petronas.com">www.pli-petronas.com</a>.

#### **Important Note**

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