

PETRONAS GREASE LiCa TMG

Lithium Calcium Industrial Grease

PETRONAS Grease LiCa TMG is a Lithium Calcium grease specially developed for lubricate the traction motor gear cases of all locomotives including the latest high horsepower units. Formulated with selected semi synthetic base oils enhanced with Lithium Calcium soap, advanced extreme pressure, anti-oxidant, anti-rust, and corrosion inhibitor additives. PETRONAS Grease LiCa TMG provides excellent oxidation stability, high load carrying capabilities, and long-lasting protection over a wide range of environmental conditions and equipment requirements.

PETRONAS Grease LiCa TMG meets or exceeds key industrial specifications and OEM requirements.

Applications

PETRONAS Grease LiCa TMG is recommended for use in:

- traction motor gear cases of all locomotives including the newest, high horsepower units
- slush pans and open reservoirs of open gear applications of all sizes such found in tube mills and rail car tipplers. Can also be used in various enclosed gear cases used throughout industry
- services ranging from small, lightly loaded open gears of machine tools or small presses to heavily loaded gears such as those of cement and other rotary mills, shovels, plastic or rubber mills and large presses
- application at high temperatures up to 120°C heavy loads and low speeds.

Note: PETRONAS Grease TMG is recommended for operating temperature range of -20°C to +120°C. Short term exposure up to 150°C.

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Features and Benefits

Features	Benefits
Excellent pumpability	Excellent performance where low temperature performance is required
Excellent load carrying capacity	Contains special additives which enables the grease to withstand heavy loads without losing the lubricant film
Excellent rust & corrosion protection	Protects metal surfaces against corrosion, even when the grease is contaminated with water
Excellent resistance to water wash-out	Equipment protection and good lubrication even in presence of water
Excellent thermal and oxidation stability	Has excellent oxidation resistance and can withstand high operating temperatures without hardening.

Typical Properties

Characteristic	Method	Specification	TMG
Thickener Type	-	Lithium Calcium	Lithium Calcium
NLGI	ASTM D217	0.5	0.5
Color	Visual	Brown	Brown
Worked Penetration, mm/10	ASTM D217	355 - 385	365
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	180	185
Four Ball Wear, mm, Max.	ASTM D2266	0.40	0.40
Four Ball EP Weld Point, Min.	ASTM D2596	315	315
Roll Stability, % of Penetration Change, Max.	ASTM D1831	10	5
Water Washout, %, Max.	ASTM D1264	8	2
Rust Protection, rating	ASTM D1743	Pass	Pass
Base Oil Viscosity @40°C, cSt	ASTM D445	1950 - 2050	2000

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

www.pli.petronas.com

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Performance Levels

- DIN 51502 GPHC0K-20
- EMD EMS 1026 Type A*
- GE D50E8C*
- ISO 12924 XBCHB0

*under certification

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

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