

**Technical Data Sheet**

Revision Date: 28.08.2019 Rev. 02

# PETRONAS TUTELA WB GREASE

## Extreme Pressure Lithium Complex Grease

PETRONAS TUTELA WB Grease is an extreme pressure Lithium complex grease specially developed for the transport industry and its wheel bearing applications.

Formulated with selected mineral base oils enhanced with Lithium Complex 12-hydroxystearate soap, polymers, advanced extreme pressure, anti-oxidant, anti-rust and corrosion inhibitor additives. PETRONAS TUTELA WB Grease provides excellent structural and chemical stability, high resistance to water wash out and provides excellent protection against wear and shock loads.

PETRONAS TUTELA WB Grease meets or exceeds key industrial specifications.

### Applications

PETRONAS TUTELA WB Grease is recommended for use in:

- rolling element bearings, especially in wheel bearings where high cyclic stresses and shock loads are encountered
- boat trailer wheel bearings in fresh and salt water environments
- general automotive applications such as steering and chassis fittings, grease cups and water pump bearings

Note: PETRONAS TUTELA WB Grease is recommended for operating temperature range of -20°C to +140°C (Max. +180°C).

### Features and Benefits

Features	Benefits
Excellent adhesive and cohesive properties	Excellent grease tenacity, helps reduce leakage and extend re-lubrication intervals, reducing maintenance costs
Excellent load carrying capacity	Contain special EP additives which enable the grease to withstand heavy shock loads without losing the lubricant film
Excellent shock load protection	Reduced wear under heavy or shock loading and vibration providing equipment reliability
Excellent rust & corrosion protection	Protect bearing surfaces against corrosion, even when the grease is contaminated with water
High resistance to water wash-out and spray off	Equipment protection and good lubrication even in presence of water
Very good mechanical stability	A highly stable grease with little or no change to consistency when worked in the lubrication of wheel bearings.

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### Typical Properties

Characteristic	Method	Specification	WB
Thickener Type	-	Lithium Complex	Lithium Complex
NLGI	ASTM D217	2.5	2.5
Color	Visual	Green	Green
Worked Penetration, mm/10	ASTM D217	250 - 280	255
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	280
Four Ball Wear, mm, Max.	ASTM D2266	0,50	0,40
Four Ball EP Weld Point, Min.	ASTM D2596	400	400
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	10	8
Wheel Bearing Leakage, grams, Max.	ASTM D4290	8	3
Water Washout at 38°C, %, Max.	ASTM D1264	10	5
Water resistance at 90°C, Max.	DIN 51807:1	3	1
Water Spray off, %, Max.	ASTM D4049	30	20
Rust Protection, rating	ASTM D1743	Pass	Pass
Emcor Test (Salt Water), rating, Max.	ASTM D6138	2-2	0-0
Base Oil Viscosity @40°C, cSt	ASTM D445	450 - 470	460

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 KP2.5N-20
- GC-LB
- ISO 12924 L-XB(F)DIB2.5

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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).

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