

## **PETRONAS Grease Li EP 1, Li EP 2 and Li EP 3**

### **Premium Industrial Extreme Pressure Lithium Greases**



Extreme Pressure



Lubrication Systems



Corrosion Protection



Water Resistant

#### **Description**

**Petronas Grease Li EP 1, Li EP 2 and Li EP 3** are smooth textured, NLGI 1, 2 and 3 Lithium 12 hydroxystearate based greases which contain an EP (extreme pressure) additive, oxidation, rust, and corrosion inhibitors. These greases provide exceptional wear protection, good water wash resistance, low temperature dispensing and long life in bearings operating at elevated temperatures.

#### **Applications**

**Petronas Grease Li EP 1, Li EP 2 and Li EP 3** are recommended for the lubrication of both plain and anti-friction bearings even where severe or shock loads are experienced. Other applications include bushings and pins, geared couplings at normal speeds, vibrating shafts and sliding mechanisms under normal operating conditions.

The softer NLGI 1 is ideally suited for Centralized Lubrication Systems (CLS) whilst the NLGI 2 is a general purpose grease. The stiffer NLGI 3 grease is mainly recommended for applications where maximum protection against penetration of water or solid contaminants is required.

Operating temperature range is -30°C to +130°C

#### **Features & Benefits**

- Good mechanical stability.
- High load carrying capacity.
- Long service life.
- Shock load capability
- Easy to pump at low temperatures.
- CLS convenience (NLGI 1).
- Excellent oxidation resistance.
- Used by most equipment builders.
- Effective rust and corrosion protection

## Product Data Sheet

Effective Date 01.01.2015 Version 1.0

# PETRONAS

## High Performance Grease



PETRONAS

### Typical Properties

	Test Method	Unit	Grease EP 1	Li	Grease EP 2	Li	Grease EP 3	Li
DIN Classification	DIN 51502 DIN 51825		KP1K-30		KP2K-30		KP3K-20	
ISO Classification	ISO 12924		L-XC(F)CHB1		L-XC(F)CHB2		L-XC(F)CHB3	
NLGI Grade	ASTM D217		1		2		3	
Thickener Type			Lithium		Lithium		Lithium	
Colour	Visual		Light Brown		Light Brown		Light Brown	
Penetration, @ 25°C Worked	ASTM D217	0.1 mm	310-340		265-295		220-250	
Dropping Point	IP 396	°C	190		190		190	
Viscosity of Base Oil @ 40°C	ASTM D445	cSt	190		190		190	
4-Ball Weld Load	DIN 51350:4	N	2600		2800		2800	
4-Ball Wear Scar 40kg/1hr	DIN 51350:5	mm	0.5		0.5		0.5	
20,000 Strokes Worked Penetration	ASTM D217	% Change	10		10		10	
Shell Roll Stability – 24hrs	ASTM D1831	% Change	10		10		10	
Density	IP PM-CS/03	g/ml	0.91		0.91		0.92	

### Health & Safety

Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Safety Data Sheet (SDS) are followed. MSDS's are available upon request through your sales contract office, or via the Internet. This product should not be used for purposes other than its intended use. If disposing of used product, take care to protect the environment. Due to continual product research and development, the information contained herein is subject to change without notification.