

## Energrease LC 2

### High Performance Lithium Complex Grease

#### Description

Energrease LC 2 is a multi-purpose, high-performance grease, based on mineral oil and a lithium-complex soap and containing a red dye to differentiate from conventional soap type lithium greases. It is formulated to provide excellent high-temperature lubrication performance. Energrease LC 2 has EP load-carrying properties and contains additives selected to enhance resistance to oxidation, corrosion and wear.

#### Application

Energrease LC 2 is formulated for use in grease-lubricated plain or rolling bearings operating at temperatures from -30 to 160°C (continuous rating), peaking up to 180°C. In such cases, the frequency of re-lubrication should be increased. Energrease LC 2 is primarily recommended for high temperature applications such as papermaking machinery or bearings of ventilation machinery and oven fans as well as general applications on industrial machinery, electric motors and machine tools. Energrease LC 2 is also suited for bearing lubrication under highly loaded and vibratory conditions – such as in steel mills, railway axle-boxes and construction equipment. The long service-life potential of Energrease LC 2 at temperatures over 100°C makes it ideally suited to machines in which poor accessibility makes frequent degreasing difficult.

#### Main Performance Features

- High operating temperature capability.
- Suitable for highly loaded and vibratory working conditions.
- Maximum equipment protection.
- Long service life.
- Excellent anti-corrosion properties.
- Very adhesive to surfaces.

#### Packaging and Storage

Supplied in packs of approximately 18 kg pails and 180 kg drums. Note the actual pack size may vary according to country of supply.

Where outdoor storage is unavoidable, packs should be covered.

Ensure packs are tightly resealed after use and that they have not been contaminated in any way.

## Typical Characteristics

	Unit	Test Method	Energrease LC 2
Thickener			Lithium Complex
NLGI Number		ISO 2137 / ASTM D217	2
Texture		Visual	Smooth
Colour		Visual	Red
Drop Point	°C	ASTM D566	>240
Base oil viscosity @ 40 °C	mm <sup>2</sup> /s	ISO 3104 / ASTM D446	150
Worked Penetration, 25°C / 60 strokes	0.1 mm	ISO 2137 / ASTM D217	265-295
Working Stability, 60°C / 100,000 strokes	0.1 mm	ASTM D217	+35
Oil Separation 168 h / 40 °C	% wt	IP 121 / DIN 51 817	3.5
Anti -Rust Performance (Emcor)		IP 220 / DIN 51802	0/1
Oxidation Stability, 100h / 100 °C	bar	ASTM D942 / DIN 51808	0.1
Copper Corrosion, 24 h / 120 °C		DIN 51811 / ASTM D1261	1
Water resistance, 3 h/90 °C		DIN 51 807/1 / ASTM D1264	1
Water Wash Out, 1 h / 38 °C		DIN 51807/2	1
Timken OK Load	lbs	ASTM D2509	45
Four Ball EP Test, Welding Load	N	ASTM D2783 / DIN 51350/4	2800
SKF-R2F-test rig, Cond 'B', 160 °C		DIN 51 806	Pass
FAG FE9 Test, Expected service life @ 150 °C			
10% failure rate	h	DIN 51821	80
50% failure rate	h	DIN 51821	>100
Flow Pressure, -20 °C	mbar	DIN 51805	1,350
+20 °C	mbar	DIN 51805	100
DIN Classification		DIN 51502 / 51826	KP2P

The above figures are typical of those obtained with normal production tolerances, and do not constitute a specification. Note 1 mm<sup>2</sup> s<sup>-1</sup> = 1 cSt.

## General Advice

Further information on all BP Marine lubricants is available from any BP Marine office or from:

BP Marine [www.bpmarine.com](http://www.bpmarine.com)

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