#### **Product Data**



# **BP Energrease LC Range**

Multi-purpose high performance grease

## **Description**

BP Energrease™ LC are multi-purpose high-performance greases based on mineral oil and a lithium-complex soap; they are formulated to provide excellent high-temperature lubrication performance. They possess EP load-carrying properties, and contain additives selected to enhance oxidation, corrosion and wear resistance.

## **Application**

Energrease LC greases are formulated for use in grease-lubricated plain or rolling bearings operating at temperatures from -30 to 150°C. They may also be used for short periods at temperatures of up to 180°C in bearings designed to operate under such conditions. In such cases, the frequency of re-lubrication should be increased; operators should contact equipment manufacturers for guidance.

Examples of applications include all types of general industrial machinery, electric motors and machine tools, as well as applications involving higher temperatures – such as papermaking machinery or bearings of ventilation machinery and oven fans.

Energrease LC greases are 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 at temperatures over 100°C makes it ideally suited to machines in which poor accessibility makes frequent regreasing difficult

## **Advantages**

- 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

# **Typical Characteristics**

Test	Methods	Units	LC 1	LC 2
Thickener type	-	-	Li-complex	Li-complex
NLGI Classification	ISO 2137 / ASTM D 217	-	1	2
Texture	Visual	-	smooth	smooth
Colour	Visual	-	brown	brown
Drop Point	ISO 2176 / ASTM D2265	°C	> 260	>260
Base oil viscosity 40°C	ISO 3104 / ASTM D445	mm²/s	220	220
Worked Penetration, 25°C / 60 strokes	ISO 2137 / ASTM D 217	0.1mm	310-340	265-295
Working Stability, 60 / 100000 strokes	ISO 2137 / ASTM D217	0.1mm	30	25
Oil Separation, 168 h / 40°C	IP 121 / DIN 51817	%wt	6%	5%
SKF Emcor Water Wash-Out (Distilled water)	IP 220 / DIN 51802	-	pass (D/O)	pass (O/O)
SKF Emcor (Acidic solution)	IP 220 / DIN 51802			pass (O/O)
SKF R2F condition B @ 140°C	DIN 51806			pass 140
Copper-Corrosion, 24 h / 120°C	ISO 2160 / ASTM D4048		1	1
Oxidation Stability, 100 h / 100°C	ASTM D942 / DIN 51808	bar	0.7	0.2
Timken OK-load	ASTM D2509	lbs	45	45
Four Ball EP test, welding load	ASTM D 2783 / DIN 51350/4	N	2600	2600
Shell Roll Stability	ASTM D1831			<+55 units
SKF-V2F-test 500 & 1000rpm.		-		pass (Og/+26g)
SKF WBG test, vibrated				pass
Flow pressure: -20°C/+15°C	DIN 51805	mbar		600/120
DIN Classification	DIN 51502		KP1 N-30	KP2N-30

Subject to usual manufacturing tolerances

#### **Additional Information**

In order to minimise potential incompatibilities when converting to new grease, all previous lubricant should be removed as much as possible prior to operation. During initial operation, re-lubrication intervals should be monitored closely to ensure all previous lubricant is purged.

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