



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 re-greasing 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	mm ² /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 (0/0)	pass (0/0)
SKF Emcor (Acidic solution)	IP 220 / DIN 51802	-		pass (0/0)
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 (0g/+26g)
SKF WBG test, vibrated		-		pass
Flow pressure: -20°C/ +15°C	DIN 51805	mbar		600/120
DIN Classification	DIN 51502	-	KP1N-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.

BP, Energrease LC, and the BP logo are trademarks of BP p.l.c, used under licence

INTERNATIONAL All reasonable care has been taken to ensure that the information contained in this publication is accurate as of the date of printing. However, such information may, nevertheless, be affected by changes in the blend formulation occurring subsequent to the date of printing. Material Safety Data Sheets are available for all BP Ltd products. The MSDS must be consulted for appropriate information regarding storage, safe handling and disposal of a product.

BP Limited, Pipers Way, Swindon, Wiltshire SN3 1RE, UK
www.castrol.com/industrial