

# LUKOIL® POLYFLEX EP 1-460 LC HD

Special Lithium-Calcium Grease with Solid Lubricants

## DESCRIPTION

LUKOIL® POLYFLEX EP 1-460 LC HD is antifriction grease based on high-quality high-viscous mineral base oil blend thickened with specialty lithium-calcium soap. That's why grease is applicable under hot and wet climate conditions and full contact with water. The grease is fortified with package of high-performance additives improving performance and contains solid lubricants for operation under boundary friction conditions. Service temperature range is from -20 up to +130°C.

LUKOIL® POLYFLEX EP 1-460 HD LC grease contains specially selected additives in its formula, which provide excellent water washout and corrosion protection of lubricated components in wet environment conditions.

LUKOIL® POLYFLEX EP 1-460 HD LC grease due to solid lubricant content has excellent anti-wear and extreme pressure features, providing smooth movement without jerks, reliable protection of equipment in conditions of specific sliding load and shock load.

LUKOIL® POLYFLEX EP 1-460 LC HD Grease has soft consistency and high resistance to thermal, structural, and oxidative destruction.



### **ADVANTAGES:**

- Operates under boundary friction conditions
- Prevents sticking and seizure
- Excellent extreme pressure properties
- Extended service life
- Good anti-corrosion properties
- Good water resistance
- Prevents stick-slip effect

### **COMPOSITION:**

- Highly purified high-viscous mineral oil
- Specialty lithium-calcium soap
- EP, AW, anti-oxidation, anti-corrosion additives
- Solid lubricants

### **APPLICATION IN UNITS:**

- Heavy-loaded sliding bearings
- Splined joints, studs, pivots, pins, axes
- Medium-loaded gear drives
- Various sliding surfaces operating on low speeds and under high dynamic loads

### **APPLICATION EXAMPLES:**

- Mining and construction machinery, operating under tropical climate conditions
- Allowed to be used in the individual lubrication systems where use of NLGI 1 class lubricant with solid lubricants is recommended

LUKOIL POLYFLEX EP 1-460 LC HD. Edition 07/19 replaces edition 04/17

This product is manufactured according to STO 65561488-029-2015

## **LUKOIL® POLYFLEX EP 1-460 LC HD**

### **TYPICAL PROPERTIES**

Standard*	Property	Unit	Value
DIN 51502	Marking according to DIN 51502		KPF1K-20
ISO 6743-9	Marking according to ISO 6743-9		L-XBCFB 1
	Color, appearance		Charcoal-grey
	Service temperature range	°C	-20 ... +130
DIN 51818	NLGI consistency class		1
ISO 2137	Worked penetration (mixed, 60 double strokes)	mm/10	310-340
DIN 51562	Base oil viscosity at 40°C	mm <sup>2</sup> /s	460
DIN 51562	Base oil viscosity at 100°C	mm <sup>2</sup> /s	31
ISO 2176	Drop point	°C	>190
ASTM D2596	Weld load (4-ball machine test) at 25°C	N	3685
ASTM D2266	Wear scar (4-ball machine test)	mm	0,45
DIN 51802	Corrosion degree (rolling bearings, distilled water)		0-0
ASTM D4048	Corrosion degree (copper strip)		1a

\*DIN: Deutsche Industrie Norm.

ISO: International Standardization Organization.

ASTM: American Society for Testing and Materials.

### **HOW TO USE**

This grease can be applied manually with brush or spatula, as well as through individual lubrication systems.

### **USABLE LIFE AND STORAGE**

When stored in the original unopened containers in a dry place, this product has a shelf life of at least 36 months from the date of production.

### **HANDLING PRECAUTIONS**

This product doesn't contain any toxic ingredients. During storage, transportation and application of this product, the safety rules for handling mineral lubricating materials and the environment protection regulations must be observed.

For further information on how to use LUKOIL® products, please refer to the product MSDS.

### **TECHNICAL SUPPORT**

For correct selection of lubricating materials to meet your needs, for more detailed information on the products, as well as if you have any other questions, we recommend you to contact our technical support service specialists by e-mail: [grease.support@lukoil.com](mailto:grease.support@lukoil.com)

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Product technical properties are typical and can vary in strong limits.

Due to research and development of science and technology technical properties of product indicated in this Technical Data Sheet can be changed without notification.