

# LUKOIL THERMOFLEX EP 1-180

Multipurpose High-Temperature Complex Lithium Grease

## **DESCRIPTION**

LUKOIL® THERMOFLEX EP 1-180 is a multipurpose high-temperature grease based on complex lithium soap, highly refined mineral oils blend with low evaporation, good stability to oxidation. The grease contains high-performance additive package.

LUKOIL® THERMOFLEX EP 1-180 grease has excellent tribological features and can operate under heavy mechanical loads and in frequent contact with water. Service temperature range is from - 30 up to +160°C.

LUKOIL® THERMOFLEX EP 1-180 Grease is blue in color and has soft consistency.



### **ADVANTAGES:**

- High extreme pressure (EP) properties
- Excellent load carrying capacity at low temperatures
- Excellent pumping ability
- High water resistance
- Excellent adhesion
- Very good anti-corrosion properties
- Resistance to shock and vibrational loads

### **COMPOSITION:**

- Highly refined mineral oil
- Complex lithium soap
- Anti-wear (AW) / extreme pressure (EP), anti-corrosion, anti-oxidation additives

### **APPLICATION IN UNITS:**

- Centralized lubrication systems
- Bearings, bushings, swivels, guideways operating for a long while under heavy loads, in wet environments, exposed to intensive vibrations, high temperatures and steam

### **APPLICATION EXAMPLES:**

- Centralized lubrication systems in construction, mining, lumbering and agricultural machinery where use of NLGI 1 class greases is recommended
- Used in high-speed bearings of vehicles and various industrial equipment in winter conditions

LUKOIL THERMOFLEX EP 1-180. Edition 04/18 replaces edition 10/16

This product is manufactured according to **STO 65561488-013-2014**

## **LUKOIL® THERMOFLEX EP 1-180**

### **TYPICAL PROPERTIES**

Standard*	Property	Unit	Value
DIN 51502	Marking according to DIN 51502		KP1P-30
ISO 6743-9	Marking according to ISO 6743-9		L-XCEHB 1
	Color	Blue to navy-blue	
	Service temperature range	°C	-30 to +160
DIN 51818	NLGI consistency class		1
ISO 2137	Worked penetration (mixed, 60 double strokes)	mm/10	310-340
ISO 2137	Penetration change at 25 °C after 10000 cycles	mm/10	±10
DIN 51562	Base oil viscosity at 40°C	mm <sup>2</sup> /s	180
DIN 51562	Base oil viscosity at 100 °C	mm <sup>2</sup> /s	16
ISO 2176	Drop point	°C	>220
ASTM D2596	Weld load (4-ball machine test) at 25°C	N	3479
ASTM D2266	Wear scar (4-ball machine test)	mm	0,4
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, and to get 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.