

LUKOIL STEELFLEX 1-240

Specialty complex calcium grease for metallurgy

DESCRIPTION

LUKOIL® STEELFLEX 1-240 is a specially developed high-temperature grease for centralized lubrication systems of metallurgical equipment based on high-quality mineral oils thickened with complex calcium soap and fortified with additive package providing high performance.

LUKOIL® STEELFLEX 1-240 is developed to lubricate units and mechanisms operating under high loads, prolonged exposure to ambient temperatures up to +160 °C in conditions of high humidity or permanent water contact.

LUKOIL® STEELFLEX 1-240 has high tribological features, reduce friction and wear, and it is easy to pump grease through the centralized lubrication systems. The grease is formulated to provide high thermal and mechanical structure stability during storage and operation.









ADVANTAGES:

- High water resistance
- Superior thermal stability
- High extreme pressure (EP) properties
- Excellent mechanical stability
- Good pumping ability
- Low coefficient of friction
- Very good anti-corrosion properties
- Extended service life

APPLICATION IN UNITS:

- Centralized lubrication systems
- Rolling and sliding bearings
- Guideways
- Friction units made of nonferrous metals
- Some gearbox types

COMPOSITION:

- Highly purified mineral oils
- Complex calcium soap
- AW, EP, anti-oxidation and anti-corrosion additives

APPLICATION EXAMPLES:

- Bearings of rolling mills operating at high temperatures and in permanent contact with water
- Centralized lubrication systems metallurgical equipment where use of NLGI grade 1 lubricating material with good pumping ability and water resistance of grease is required

LUKOIL® STEELFLEX 1-240. Edition 12/21 replaces edition 09/20





This product is manufactured according to STO 65561488-059-2016

LUKOIL® STEELFLEX 1-240 TYPICAL PROPERTIES

| Standard | Property | Unit | Value |
|-------------|----------------------------------------------------------|---------|-------------|
| DIN 51502 | Marking according to DIN 51502 | | KP1P-20 |
| ISO 6743-9 | Marking according to ISO 6743-9 | | L-XBEEB 1 |
| | Service temperature range | °C | -20 to +160 |
| DIN 51818 | NLGI grade | | 1 |
| ISO 2137 | Worked penetration (60 strokes) | mm/10 | 310–340 |
| DIN 51562 | Base oil viscosity @ 40°C | mm²/s | 240 |
| DIN 51562 | Base oil viscosity @ 100 °C | mm²/s | 20 |
| ISO 2176 | Dropping point | °C | >280 |
| ASTM D2596 | Four Ball Weld Load @ 25 °C | N kg | 2323 237 |
| ASTM D2266 | Four Ball Wear Scar Diameter | mm | 0.4 |
| DIN 51802 | Corrosion protection (SKF-Emcor, distilled water) | | 0-0 |
| ASTM D4048 | Copper corrosion | | 1a |
| DIN 51817 | Oil separation (18 h, @ 40 °C) | % | <4 |
| DIN 51805 | Flow pressure @ -20 °C | mbar | <1100 |
| DIN 51821-2 | Bearing lifitime SKF-ROF (load 1500 N, 6000 rpm, 160 °C) | h | >200 |
| DIN 51807 b | Water washout | % | <4 |

HOW TO USE

This grease can be applied manually with a brush or spatula, as well as through centralized lubrication system.

USABLE LIFE AND STORAGE

The guaranteed shelf life is 36 months from the date of manufacture in the manufacturer's container, subject to the conditions of transportation and storage.

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 the proper 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

LUKOIL® STEELFLEX 1-240. Edition 12/21 replaces edition 09/20

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.

