

# LUKOIL AQUAFLEX EP 1-420; EP 1,5-420

Specialty Water Resistant High-Temperature Greases based on Calcium Sulfonate

## DESCRIPTION

LUKOIL® AQUAFLEX EP 1-420 and EP 1,5-420 are specialty water resistant high-temperature greases based on calcium sulfonate thickener, highly purified high viscosity mineral oil and package of high-performance additives improving adhesion and performance.

LUKOIL® AQUAFLEX EP 1-420 and EP 1,5-420 greases have excellent tribological features and can operate under very heavy mechanical loads and permanent water contact even with sea water. Recommended service temperature range is from -20 to +180°C.

LUKOIL® AQUAFLEX EP 1-420 and EP 1,5-420 greases have soft consistency.



### ADVANTAGES:

- Excellent resistance to static and dynamic exposure to water
- Very high load carrying capacity
- Excellent pumpability, also at low temperatures
- Very good heat resistance
- Superior corrosion protection
- Excellent mechanical stability

### COMPOSITION:

- Highly purified high viscosity mineral oil
- Calcium sulfonate thickener
- Additive package: anti-corrosion, anti-oxidation, anti-wear (AW) / extreme pressure (EP) additives improving adhesion

### APPLICABLE IN UNITS:

- Centralized lubrication systems
- Rolling bearings operating under high loads and at high temperatures, subject to exposure to water and risk of corrosion
- Sliding bearings
- Bushings, swivels, units where water resistance of the lubricant is required

### APPLICATIONS:

- Centralized lubrication systems of the rolling mills in metallurgical industry where mechanisms are exposed to high temperature, water, steam and very high loads
- Used as water resistant lubricant in mining equipment
- Press-pelletizers operating under high loads and exposed to steam

LUKOIL AQUAFLEX EP 1-420; 1,5-420. Edition 04/18 replaces edition 01/17

This product is manufactured according to STO 65561488-014-2014

## **LUKOIL® AQUAFLEX EP 1-420; EP 1,5-420**

### **TYPICAL PROPERTIES**

Standard*	Property	Unit	EP 1-420	EP1,5-420
DIN 51502	Marking according to DIN 51502		KP1R-20	KP1,5R-20
	Color		Light-brown	
	Service temperature range	°C	-20 to +180	-20 to +180
DIN 51818	NLGI consistency class		1	1,5
ISO 2137	Worked penetration (mixed, 60 double strokes)	mm/10	310-340	295-310
DIN 51562	Base oil viscosity at 40°C	mm <sup>2</sup> /s	420	420
DIN 51562	Base oil viscosity at 100°C	mm <sup>2</sup> /s	28	28
ISO 2176	Drop point	°C	>330	>330
ASTM D2596	Weld load (4-ball machine test) at 25°C	N	4635	4635
ASTM D2266	Wear scar (4-ball machine test)	mm	0,4	0,4
DIN 51802	Corrosion degree (rolling bearings, distilled water)		0-0	0-0
ASTM D 4048	Corrosion degree (copper strip)		1a	1a
ASTM D2509	Timken OK load	kg	55	55
DIN 51807 b	Water washout of the bearing	%	< 2	< 2

\*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 system.

### **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 the proper 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.