

# LUKOIL CARBOFLEX OG 000-1500 HD; OG 00-2000 HD; OG 0-4000 HD

Specialty complex aluminium greases with solid lubricants for gear drives and quarry equipment meeting P&H 520 requirements

## **DESCRIPTION**

Greases of the LUKOIL® CARBOFLEX OG HD series are specialty high-quality greases for open gears of excavators, draglines, crushers, furnaces and other equipment, based on special high-viscosity mineral oil and complex aluminum soap with a high content of solid lubricants; meet OEM requirements P&H 520, ver. 00, 3-97.

Greases of the LUKOIL® CARBOFLEX OG HD series form a strong film on metal surfaces, which minimizes contact between surfaces and wear. The composition of the lubricants provides reliable lubrication under extreme loads, excellent colloidal stability during storage and operation.

These products can be pumped in central lubrication systems and are recommended for use at ambient temperatures:

LUKOIL® CARBOFLEX OG 000-1500 HD from –45 °C to +10 °C;

LUKOIL® CARBOFLEX OG 00-2000 HD from –20 °C to +40 °C;

LUKOIL® CARBOFLEX OG 0-4000 HD from –10 °C to +50 °C.



<p><b>ADVANTAGES:</b></p> <ul style="list-style-type: none"> <li>• Meets P&amp;H 520 requirements</li> <li>• Very high load carrying capacity</li> <li>• Excellent adhesion</li> <li>• Good water resistance</li> <li>• Easy to pump</li> </ul>	<p><b>COMPOSITION:</b></p> <ul style="list-style-type: none"> <li>• High-viscosity mineral oil</li> <li>• Complex aluminium soap</li> <li>• Additive package: anti-oxidation, anti-corrosion, and adhesive additives</li> <li>• Solid lubricants</li> </ul>
<p><b>APPLICATION IN UNITS:</b></p> <ul style="list-style-type: none"> <li>• Open gear drives</li> <li>• Guideways</li> <li>• Chains</li> <li>• Wire cables</li> <li>• Splined joints</li> </ul>	<p><b>APPLICATION EXAMPLES:</b></p> <ul style="list-style-type: none"> <li>• Open gear drives of the kilns and shafts</li> <li>• Shovel bucket handles and bushings in the bucket excavators and draglines</li> <li>• Centralized lubrication systems of the quarry and mining machinery</li> </ul>

LUKOIL® CARBOFLEX OG 000-1500 HD; OG 00-2000 HD; OG 0-4000 HD. Edition 12/21 replaces edition 07/19

These products are manufactured according to STO 65561488-057-2016

## **LUKOIL® CARBOFLEX OG 000-1500 HD, OG 00-2000 HD, OG 0-4000 HD TYPICAL PROPERTIES**

Standard	Property	Unit	OG 000-1500 HD	OG 00-2000 HD	OG 0-4000 HD
DIN 51502	Marking according to DIN 51502		OGF000N-45	OGF00N-20	OGF0N-10
	Color		Black		
	Service temperature range	°C	-45 to +140	-20 to +140	-10 to +140
	Recommended for use at ambient temperature	°C	-45 to +10	-20 to +40	-10 to +50
DIN 51818	NLGI grade		Thick liquid	00	0
ISO 2137	Worked penetration (60 strokes)	mm/10		400–430	355–385
DIN 51562	Base oil viscosity @ 40 °C	mm <sup>2</sup> /s	1520	2000	4000
DIN 51562	Base oil viscosity @ 100 °C	mm <sup>2</sup> /s		120	240
ASTM D92	Flash point in open cup, min	°C	160	200	200
ISO 2176	Dropping point	°C		>180	>200
DIN 51805	Flow pressure (at temperature), max	mbar	1400 (-45 °C)	1400 (-20 °C)	1400 (-10 °C)
ASTM D2596	Four Ball Weld Load @ 25 °C	N kg	6174 630	6174 630	6174 630
ASTM D2266	Four Ball Wear Scar Diameter	mm	0.6	0.6	0.6
DIN 51802	Corrosion protection (SKF-Empcor, distilled water)		0-0	0-0	0-0
ASTM D4048	Copper corrosion		1a	1a	1a

### **HOW TO USE**

These greases 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**

These products don't contain any toxic ingredients. During storage, transportation, and application of these products, 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](mailto:grease.support@lukoil.com)

LUKOIL® CARBOFLEX OG 000-1500 HD; OG 00-2000 HD; OG 0-4000 HD. Edition 12/21 replaces edition 07/19  
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.