# **IUKOIL**

# PGK-1

#### Grease for driver's brake valves

# **DESCRIPTION**

Grease PGK-1 for driver's brake valves is made on the basis of a mixture of high-quality mineral oils thickened with lithium soaps of fatty acids. It contains graphite, fillers that improve adhesion characteristics and a package of multifunctional additives. It is produced at one of the most modern industrial facilities in Russia, using high-quality raw materials.

PGK-1 grease is intended for lubrication of driver's brake valves and disconnecting valves of diesel locomotives, electric locomotives and railway multiple units. It is used at temperatures from -50 °C to +100 °C.



<ul> <li>ADVANTAGES:</li> <li>Effectively prevents penetration of aggressive liquids and gases, as well as abrasive particles (dust, dirt, etc.) to friction pairs</li> <li>Excellent protective properties</li> <li>High adhesion and forming a strong film on the contact surfaces</li> </ul>	<ul> <li>COMPOSITION:</li> <li>A blend of high quality mineral oils</li> <li>Lithium soap</li> <li>Graphite</li> <li>Fillers</li> <li>A package of multifunctional additives</li> </ul>
<ul> <li>APPLICATION IN UNITS:</li> <li>Driver's brake valves</li> <li>Disconnecting valves</li> </ul>	<ul> <li>APPLICATION EXAMPLES:</li> <li>Driver's valves and disconnecting valves for diesel locomotives, electric locomotives and railway multiple units</li> </ul>

PGK-1. Edition 12/21, replaces all previously published edition



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## This product is manufactured according to TU 3185-003-01055954-02

# **PGK-1 TYPICAL PROPERTIES**

Standard	Property	Unit	Value
	NLGI grade		1–2
	Appearance		Homogeneous ointment of a smooth structure of black color
GOST 5346 V	Worked penetration @ 25 °C (60 strokes)	mm/10	280-350
GOST 7163	Viscosity @ $-30$ °C and an average gradient of deformation rate of $10 \text{ s}^{-1}$ , max	Pa·s	1500
GOST 7143	Ultimate strength @ 50 °C	Ра	100
GOST 7142	Oil separation, max	%	10
GOST 6793	Dropping point, min	°C	160
GOST 2477	Water content, max	%	Absence
GOST 6707	Mass fraction of free organic acids, max	mg KOH/g	2
GOST 9.080	Corrosion effect on copper		Pass
GOST 9490	Four Ball Non-Seizure Load (P <sub>k</sub> ), min	Ν	340

### HOW TO USE

This grease can be applied manually with a brush or spatula.

#### **USABLE LIFE AND STORAGE**

The guaranteed shelf life is 24 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<sup>®</sup> 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

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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.

