

## MULTI-PURPOSE LUBRICANTS



TS U 23.2-36451680-127:2010

### LIGREASE EP

**Ligrease EP** grease series is designed for lubrication of friction units of various industrial equipment and machinery vehicles that operate at high loads, where elevated EP properties are needed.

**Ligrease EP 00** is designed for the lubrication of gearboxes and gear drives, rolling and sliding bearings, in centralized lubrication systems.

**Ligrease EP 0** is recommended for the lubrication of heavily loaded gearboxes and gear drives, in centralized lubrication systems of vehicles and industrial equipment.

**Ligrease EP 1** is a lubricant with a low-temperature fluidity designed for centralized lubrication systems of friction units for casting, forging and other industrial equipment operating under heavy loads, vibration and extreme pressure.

**Ligrease EP 2** and **Ligrease EP 3** are used as mortgage.

Index name	Ligrease EP 00	Ligrease EP 0	Ligrease EP 1	Ligrease EP 2	Ligrease EP 3
Compliance with classifications NLGI, DIN 51502	00 KP00K-30	0 KPOK-30	1 KP1K-40	2 KP2K-30	3 KP3K-30
Thickener	Li+EP				
Operating temperature range, min...max, °C	-30...+120	-30...+120	- 40...+120	- 30...+130	-30...+130
Dropping point, °C, not less than	150	165	185	190	190
Penetration at 25°C, mm·10 <sup>-1</sup>	380-430	340-380	310-340	265-295	220-250
Shear strength at 50°C, Pa	не норм.	100 (20°C)	150	200	300
Colloid stability, %, not more than	35**	30	20	15	12
Mass fraction of free alkalis in NaOH equivalent, %, mg KOH/g, not more than	0,2				
Mass fraction of mechanical impurities, %, not more than	Absence				
Water content, %, not more than	Traces				
Tribological characteristics on 4 balls machine at (20±5)°C, H, not less than:					
• welding load	2607	2607	2607	2764	2764

\*\* The index is determined under a 200g load.

## MULTI-PURPOSE LUBRICANTS



TS U 23.2-30802090-018:2004

### Agrinol Litol

Anti-friction, waterproof and multi-purpose greases **Agrinol Litol** and **Agrinol Litol-z** are intended for lubricating of all types of rolling and sliding bearings, joints, toothed and other gears of industrial and electric machines, conveyors and various mechanisms of industrial, agricultural and constructing equipment.

Grease **Agrinol Litol** is used to as mortgage grease in mechanisms that operate at medium loads and speeds, high temperatures and the possibility of moisture penetration in friction units.

Grease **Agrinol Litol-z-3** is used for lubrication of friction units of various mechanisms, machines and other equipment using centralized lubrication systems, lubricant superchargers, as well as by the mortgage method.

### Litol-24

The universal anti-friction lithium waterproof grease is used for friction units of wheeled and full-track transport, industrial equipment and multi-purpose ship mechanisms.

GOST 21150-87

Index name	Agrinol Litol	Agrinol Litol-z	Litol-24
Compliance with classifications NLGI, DIN 51502	3 K3K-30	1/2 K 1/2 K-40	3 K3K-40
Thickener	Li		
Operating temperature range, min...max, °C	-30 ... +130 (+150)	-40 ... +120	-40 ... +130
Dropping point, °C, not less than	185	180	185
Penetration at 25°C, mm·10 <sup>-1</sup>	230-290	270-340	220-250
Effective viscosity at 0°C and with average gradient of the strain rate 10 s <sup>-1</sup> , Pa·s, not more than	300 (0°C)	250 (0°C)	280 (0°C)
Shear strength at 20°C, Pa	350	250	500-1000
Colloid stability, %, not more than	12	20	12
Tribological characteristics on 4 balls machine at (20±5)°C, H, not less than:			
• welding load	1381		1410
• critical load	617		630
• scuff index	275		28