

## MULTI-PURPOSE GREASES

### Litol-24

GOST 21150 – 87

### NLGI 3

#### Composition

Petroleum oil thickened with by lithium-12-hydroxy stearate soap; Contains anti-oxidation and viscosity additives.

#### Application area

Multipurpose automotive grease.

Is applied at mechanisms of tractors, tracked vehicles, excavators, bulldozers, ship machinery, is used in electric machines, mining and road-building equipment.

For all kind of friction units: rolling and sliding bearings, bearings with sealing

washers as non-moved grease; joints, gears and other transmission.

Is used in closed units (hubs of automotive wheels, bearings of water pumps, etc.) instead of general-purpose greases and allows prolonging lubricants operation.

#### Key performance properties

- high colloid, chemical and mechanical stability;
- excellent anti-corrosion and conservation properties;
- reliable at low temperatures;
- good adhesion to the metal surfaces.

#### Physical and chemical properties

Properties	Litol-24	Test methods
<b>Compliance with classifications: NLGI // DIN 51502</b>	<b>3 // K3K-30</b>	
<b>Thickener</b>	<b>Li</b>	
<b>Operating temperature, °C</b>	<b>-40 ... 120 (130)</b>	
1. Appearance	Homogeneous smooth ointment with color from light yellow to brown	GSTU 38.001
2. Worked penetration at 25°C (60 double strokes), m × 10 <sup>-4</sup> , within	220-250	GOST 5346
3. Dropping point, °C, not lower than	185	GOST 6793
4. Colloid stability, % of separated oil, not more than	12	GOST 7142
5. Shear strength: - at 20°C, Pa, within - at 80°C, Pa, not less than	500-1000 200	GOST 7143
6. Mass fraction of free alkali in NaOH equivalent, %, not more than	0,1	GOST 6707
7. Effective viscosity, Pa·s, not more than - at -20°C with average gradient of the strain rate 10 s <sup>-1</sup> , - at 0°C with average gradient of the strain rate 10 s <sup>-1</sup> , - at +50°C with average gradient of the strain rate 10 s <sup>-1</sup> .	650 280 8	GOST 7163
8. Corrosion test on copper plate acc. to GOST 859-78 (MO, MI mark)	Pass	GOST 9.080
9. Mass fraction: - water, %, not more than - mechanical impurities, %, not more than	None 0,05	GOST 2477 GOST 6479
10. Rubber swelling (26-44 mark), %, - volume changes - hardness changes	+ 8 + 8	GOST 9.030 p. 3.6
11. Tribological properties on four-ball machine : - welding load, (Rs), N(kGs), n/m - critical load, (Rs), N(kGs), n/m - scuff index, (Si), not less than	1410 630 28	GOST 9490

**Shelf life:** 5 years from the manufacturing date.