

LZ-TsNII (U)

Railway grease

APPROVALS

Russian Railways, OJSC

PRODUCT DESCRIPTION

The **LZ-TsNII(U)** railway grease is designed for application in railway car roller bearings, as well as in electrical machine bearings at a temperature of minus 60 °C to plus 100 °C. Due to its high operational characteristics, the **LZ-TsNII(U)** railway grease is a reliable choice for universal application in all climatic zones of Russia.

The **LZ-NII(U)** railway grease is produced from base oils thickened with sodium and calcium soap of castor oil acids with addition of imported components to ensure good anti-wear properties. It is produced from high-quality raw materials at one of the most up-to-date industrial facilities in the CIS.

APPLICATION

The **LZ-TsNII(U)** railway grease is recommended for use in railway car roller bearings, as well as in electrical machine bearings.

BENEFITS

- Wide temperature range (from -60 °C to +100 °C) make it possible to use the grease all year round in all climatic zones of Russia;
- Good wash-off properties of **LZ-NII(U)** allow replacing the grease effectively in depots;
- Good anti-wear and extreme pressure characteristics, as well as its reliable protection of roller bearings even at high sliding speeds and impact stresses result in an operational life of up to 5 years in terms of time or minimum 450 thousand km in terms of run.

The product is manufactured as per TU 0254-013-00148820-99

STANDARD CHARACTERISTICS

PROPERTY	LZ-TSNII(U)
NLGI consistency	3
Color	Yellow or light brown
Type of soap	Na-Ca
Type of base oil	Mineral
Structure	Homogeneous paste
Weight percentage of water, %, or less	0.4
Dropping temperature, °C, or more	130
Penetration at 25 °C after stirring, 0.1 mm	200–260
Ultimate strength at 50 °C, Pa within	200–600
Evaporation at 100 °C, 1 hour, %, or less	9.0
Four-ball tribological properties:	
• Critical load, N, (kgf), or more	922 (94)
• Wear scar diameter at load of 192 N, 1 hour, mm, or less	0.55
Viscosity Pa·s, at 0 °C and average gradient of strain rate of 10 s ⁻¹ , or less	150 or 600
Weight percentage of free alkali expressed in terms of NaOH, %, within	0.02–0.2
Colloidal stability, % of separated oil	10–24
Content of mechanical impurities	None
Corrosive effect on metals:	
• Brass LC40S (GOST 17711-93)	Resistant
• Steel 40 or 60 (GOST 1050-88)	Resistant

The standard product characteristics are average values and do not constitute the manufacturer's specification. They can be subject to change in accordance with the requirements of INTESMO, LLC. Please contact the technical support team for any question related to the application and replacement of grease products manufactured by INTESMO, LLC.