

AUTOMOTIVE AND INDUSTRIAL LUBRICATING GREASE

INA Lipleks S EP

General Description - Applications

INA Lipleks S EP are lithium complex mineral based lubricating greases with EP additives. Suitable for heavily and shock loaded bearings. Resist vibration and the detrimental effects of water, humidity and steam. INA Lipleks S EP 2 recommended for long-term automotive and railway wheel bearing lubrication, as well as for lubrication of grease lubricated elements in agricultural, mining, off-road and earth-moving machinery. INA Lipleks S EP 3 specially recommended for STEYR tractor under designation L. NLGI grade 1 can be used in the temperature range from -30 to 120 °C. NLGI grade 2 can be used in the temperature range from -30 to 130 °C and for short intervals reach up to 140 °C. NLGI grade 3 can be used in the temperature range from -20 to 140 °C and for short intervals reach up to 150 °C.

Performance Level - Specifications

INA Lipleks S EP 1

ISO L-XCCHB 1

DIN 51825 KP 1 K -30

INA N 22-113 TIP 1

INA Lipleks S EP 2

ISO L-XCDHB 2

DIN 51825 KP 2 N -30

INA N 22-113 TIP 1

INA Lipleks S EP 3

ISO L-XBDHB 3

DIN 51825 KP 3 N -20

Steyr Landmaschinentechnik L

INA N 22-113 TIP 1

Properties	INA Lipleks S EP			Method
NLGI number	1	2	3	
Kinematic Viscosity of Base Oil, mm ² /s				
- at 40 °C	150			ISO 3104
- at 100 °C	14			
Appearance and Colour	yellow - brown, homogeneous			visual
Dropping Point, °C	240	248	252	ISO 6299
Worked penetration, 60 strokes at 25 °C, 0,1 mm	320	275	235	ISO 2137
Corrosion (Cu, 100 °C, 3 h)	1 a			ISO 2160
Free alkali (as NaOH), mass. %	0,06	0,05	0,05	ASTM D 128
Mechanical stability, penetration change after 100 000 strokes, 0.1 mm	35	40	50	ISO 2137
Water washout (79 °C, 1 h), mass. %	6	3	1,5	ISO 11009
Wheel Bearing Leakage Tendencies (113 °C, 6 h) mass. %	-	0,9	0,5	ASTM D 1263
Oxidation stability (99 °C, 100 h) - pressure drop, kPa	14	14	14	ASTM D 942
Oil separation (40 °C, 168 h) mass. %	5	3	1	IP 121
Rust preventing properties, SKF Emcor	0/0			DIN 51802
Four ball EP Test, Weld Point, (1 430 rpm, 10 s), N	3 150	3 150	3 150	ASTM D 2596
Four ball Wear Test, Average scar diameter, (392 N, 1 200 rpm, 75 °C, 1 h), mm	0,55	0,50	0,50	ASTM D 2266
Timken OK Load (800 rpm, 24±6 °C, 10 min) N	155			ASTM D 2509

The above figures are typical of those obtained with normal production tolerance and do not constitute a specification.