

LAIJUTSU SHL- I230,I231,I232, I233, I234, I235, I236, I237

Product Description:

LAIJUTSU Industrial Gear Oils comprise a family of extreme pressure gear lubricants designed to operate over a very wide range of temperatures and conditions. These fluids possess excellent high temperature oxidation stability and superior low temperature fluidity. LAIJUTSU Industrial Gear Oils have the ability to rapidly separate from water and prevent the formation of anti-lubricating emulsions. The incorporation of special additives in LAIJUTSU Industrial Gear Oils protects equipment from rust, corrosion and foam. In addition, extreme pressure additives provide optimum protection against shock loading and offer high load carrying capabilities.

LAIJUTSU Industrial Gear Oils find applications in virtually all types of industrial settings. Some typical applications includes gear sets and oil circulating systems in steel mill, foundries, glass and bottle manufacturing plants, injection molding machines, paper mills, electrical wheel motors used in surface mining and quarries, shearing arms in underground coal mining, cement kilns, petroleum and chemical processing plants.

Applications / Benefits:

TEST DESCRIPTION	METHOD	RESULTS
Extreme Pressure Properties		
Timken Load Arm Test OK Load, lb	ASTM D-2782	65
Four Ball Extreme Pressure Test		
Load Wear Index (LWI), Kg Weld Load, Kg	ASTM D-2783	64.7 250
Weld Load, Kg FZG 4 Square		
Test, Load Stage FZG Total Wt, Loss, mg	DIN 51354	12 Pass 16.7
Rust Test		
Part A Part B	ASTM D-665(IP135)	Pass Pass

Specifications, Approvals & Recommendations

AGMA 9005-E02
DIN51517 Part 3
ISO 12925-1 CKC/CKD
US Steel 224

Typical Physical Characteristics

Test Description	Method	SHL-I230	SHL-I231	SHL-I232	SHL-I233
SAE Viscosity Grade	-	46	68	100	150
Specific Gravity @ 15 °C	ASTM D 4052	0.868	0.870	0.873	0.882
Flash Point, °C	ASTM D 92	210	216	240	238
Pour Point, °C	ASTM D 97	-24	-21	-24	-15
Kinematic Viscosity, cSt @ 40°C	ASTM D 445	46.4	68.6	100.6	151
cSt @ 100°C	ASTM D 445	6.85	8.9	11.90	14.80
Viscosity Index	ASTM D 2270	102	102	108	100
Color	ASTM D 1500	<1.5	<1.5	<1.5	<2.0

Test Description	Method	SHL-I234	SHL-1235	SHL-1236	SHL-1237
ISO Viscosity Grade	-	220	320	460	680
Specific Gravity @ 15 °C	ASTM D 4052	0.889	0.894	0.905	0.912
Flash Point, °C	ASTM D 92	240	242	258	260
Pour Point, °C	ASTM D 97	-12	-9	-6	-15
Kinematic Viscosity, cSt @ 40°C	ASTM D 445	226.4	333.0	480.0	670
cSt @ 100°C	ASTM D 445	19.50	24.60	30.40	48.70
Viscosity Index	ASTM D 2270	98	95	92	125
Color	ASTM D 1500	<2.5	<3.0	<3.5	<3.5

Health, Safety & Environment

Health and Safety

This product is unlikely to present any significant health or safety hazard when properly used in the recommended application and good standards of personal hygiene are maintained.

Avoid contact with skin. Use impervious gloves with used oil. After skin contact, wash immediately with soap and water.

Guidance on Health and Safety is available on the appropriate Safety Data Sheet, which can be obtained from your Shinkloub representative.

Protect the Environment

Take used oil to an authorised collection point. Do not discharge into drains, soil or water.