



"The First in Synthetics"®

Industrial Synthetic Lubricants Extreme Pressure

PRODUCT DESCRIPTION

AMSOIL Semi-Synthetic WL Series is a high-quality, heavy duty lubricant composed of synthetic base oils, large molecule petroleum base oils and additives specifically designed for EP applications found in gear, chain and machine tool applications. This combination of base oils and EP additives provides the excellent lubricity and film strength needed to prevent scoring and wear during equipment operations. By incorporating synthetic base oils, AMSOIL WL Oils reduce friction for good overall performance.

Machine Tool Slideways

AMSOIL formulated the WL Series with additives designed to prevent the stick/slip or chatter phenomena that commonly occur at the beginning and end of a machine tool stroke. This happens because the lubricant and additives are squeezed out during boundary lubrication conditions. Metal to metal contact then occurs, also causing wear to the slideways. AMSOIL uses EP additives that form a hard boundary layer of protection and tackifying agents that improve the adhesion properties of the oil. These additives prevent stick/slip and wear. Additionally, the WL Oils are anti-rust fortified and have excellent resistance to water washout. This is important since emulsified cutting fluids are commonly used and components are generally exposed to the environment.

Chain and Gear Lubrication

The performance characteristics of the WL Series make them ideal for chain and gear applications. These oils are friction-reducing, compatible with seals and paints and are resistant to water. The tackifier agents used ensure the components have constant lubrication, allowing the EP additives to prevent wear and the corrosion inhibitors to prevent rust. The semi-synthetic nature of the WL Oils delivers excellent performance in a wide variety of environments.

SEMI-SYNTHETIC WL SERIES SLIDEWAY, CHAIN AND GEAR LUBE

PERFORMANCE FEATURES

- Tackified for excellent adhesion and water resistance
- Rust and corrosion inhibited
- EP additives prevent stick/slip and slideway scoring
- Semi-synthetic adds lubricity and reduces friction
- Recommended for slideways, chains and EP gear applications

APPLICATION RECOMMENDATION

AMSOIL WL Series Oils are recommended for use on machine tools where mating surfaces operate under heavy loads and slow speeds. Some applications include the plain bearing slideways of lathes, shapers, grinders and milling machines plus the slideways of saws and carriages found in lumber mills. AMSOIL WL Oils are recommended for use on open or enclosed chain drives and in EP gear box applications where tackified EP gear oils are recommended or where they do not pose a problem.

Note: Do not use the WL Oils on yellow metal or worm gear applications operating at or above 200 °F.

AMSOIL PRODUCT WARRANTY

AMSOIL Industrial Lubricants are formulated to meet or exceed accepted industry specifications. AMSOIL warrants that the use of its lubricants will not cause mechanical damage to any mechanically sound equipment when AMSOIL products are used in full compliance with the company's recommendations. However, the purchaser of these lubricants is responsible for determining if these specifications are adequate and proper for the intended application. The AMSOIL warranty is limited to lubricant performance consistent with indicated specifications. No additional warranty, expressed or implied, can be made.

TYPICAL TECHNICAL PROPERTIES

Semi-Synthetic WL Series Chain Oils	WLJ ISO 68	WLK ISO 100	WLL ISO 150	WLM ISO 220
ISO VG — ASTM D-2422	.68	100	150	220
VK 100°C — ASTM D-445	.9.32	12.08	15.51	19.93
VK 40°C — ASTM D-445	.68.78	100.00	148.20	220.30
Viscosity Index — ASTM D-2270	.113	112	107	104
SPGR — ASTM D-1298	.0.8833	0.8877	0.8944	0.9042
Density — ASTM D-1298	.7.355	7.392	7.448	7.529
Flash Point °C (°F) — ASTM D-92	.240 (464)	242 (468)	244 (471)	248 (478)
Fire Point °C (°F) — ASTM D-92	.250 (482)	256 (493)	254 (489)	264 (507)
Pour Point °C (°F) — ASTM D-97	.-24 (-11)	-21 (-6)	-18 (0)	-15 (5)
Four-Ball Wear Test (40 kg, 1200 rpm, 75°C, 60 min.) — ASTM D-4172	.0.40	0.40	0.40	0.40
Copper Strip Corrosion Test — ASTM D-130	.1B	1B	1B	1B
Timken OK Load, EP — ASTM D-2782	.65 lbs.	65 lbs.	65 lbs.	65 lbs.

AMSOIL PRODUCT AVAILABILITY

AMSOIL products are available in 5-gallon pails, 55-gallon drums, 275-gallon totes and bulk quantities. For 275-gallon totes, please allow two to four weeks for delivery.

AMSOIL Industrial Lubricants are stocked in Superior, Wisconsin and in select regional distribution centers throughout the United States and Canada. AMSOIL will stock additional quantities of lubricants or special order products based on customer requests and regional demands.

For applications and recommendations, contact your local AMSOIL industrial sales representative or AMSOIL INC.

