

JAX H-P INDUSTRIAL GEAR OILS

HIGH-PERFORMANCE EP INDUSTRIAL GEAR OIL



PRODUCT DESCRIPTION

JAX H-P Industrial Gear Oils are made from shear stable, high quality hydrocracked/isodewaxed Group II base oils and are fortified with additives that deliver high performance in industrial gear applications. These oils are designed to reduce maintenance costs by extending drain intervals and protecting against wear, pitting and rust.

PRODUCT BENEFITS

- **Resistant to Oxidation**—JAX H-P Industrial Gear Oils' base stocks are inherently resistant to oxidation, helping provide long life.
- **Ideal for wide operating temperature ranges**—Their high viscosity indices, low pour points, and wax-free formulations make these lubricants ideal for use in wide operating temperature ranges. At low operating temperatures, equipment starts easier, is not starved of lubrication from channeling and product solidification, and the need for sump heaters is reduced. At higher operating temperatures, JAX H-P Industrial Gear Oils' base oils resist the degradative effects of oxidation that cause poor lubricant performance, and maintain an optimal lubricating film.
- **Water Resistant**—JAX H-P Industrial Gear Oils are hydrolytically stable and readily separate from water. This prevents unwanted oil/water emulsions that have poor lubricating properties and eases water removal from the sump.
- **Superior Additive Performance**—JAX H-P Industrial Gear Oils are fully formulated with sulfur/phosphorous extreme-pressure additives, antioxidants, rust inhibitors, and antifoam agents. JAX H-P Industrial Gear Oils' thermally stable, extreme-pressure additive system forms a hard, iron-sulfide coating on metal components. This iron-sulfide coating prevents metal-to-metal contact under boundary lubrication conditions, reduces friction and protects components against shock loading and wear. The antioxidants increase the oxidation resistance of the base oils for long, clean gear performance. These oils protect against rust from water or process contaminants and prevent foaming, ensuring proper lubrication.

APPLICATIONS

JAX H-P Industrial Gear Oils are recommended for industrial applications operating under heavy loads and shock conditions and specifying an extreme-pressure lubricant. This includes, but is not limited to, enclosed industrial spur, bevel, herringbone, helical and worm gears*, chain drives, sprockets and most metal-on-metal systems requiring extreme-pressure additives. These lubricants are excellent for use in severe operating conditions and their semi-synthetic properties make them good all-season lubricants.

JAX H-P Industrial Gear Oils meet the AGMA ratings for EP gear oils and are recommended for use in applications specifying these standards. To obtain optimum performance it is recommended that the system be thoroughly drained and, if warranted, cleaned.

The ability of JAX H-P Industrial Gear Oils to extend drain intervals is subject to operating conditions and maintenance practices. Monitoring by oil analysis is recommended.

JAX H-P Industrial Gear Oils meet NSF H2 requirements for use in food and beverage plant environments.

COMPATIBILITY

JAX H-P Industrial Gear Oils are compatible with mineral gear oils, synthetic gear oils, and seals—making them easy to use. They preserve new seals, prevent leaks, and help rejuvenate old, brittle seals. JAX H-P Industrial Gear Oils, as well as other mineral-based oils, are not compatible with polyglycol-type gear oils. Thorough flushing prior to changeover is required.

*JAX H-P Industrial Gear Oils are not recommended for use in worm gear or yellow-metal-containing applications operating at or above 200°F (93°C).

JAX H-P Industrial Gear Oils are not recommended for automotive hypoid gear applications.



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PERFORMANCE FEATURES AND BENEFITS

- Long Life/Extended Drains
- Thermally Stable
- Antiwear/Extreme-Pressure Fortified
- Antifoam Fortified
- Antirust/Antioxidation Additives
- Compatible with Seals and Other Lubricants
- Hydrolytically Stable and Readily Separates from Water

APPLICATIONS & REQUIREMENTS

- U.S. Steel 224
- AGMA 250.04
- AGMA 9005-D-94
- DIN 51517 Part 3
- David Brown ET 33/80, 51, 53 and 01
- Cincinnati Milicron P-35, P-59, P-63, P-74, P-76, P-77 and P-78

TYPICAL PROPERTIES	ISO 68 (13068)	ISO 100 (13100)	ISO 150 (13150)	ISO 220 (13220)	ISO 320 (13320)	ISO 460 (13460)	ISO 680 (13680)	METHOD
Viscosity @ 40°C, cSt	68.7	96.4	144.5	225.0	329.0	493.5	693.3	ASTM D 445
Viscosity @ 100°C, cSt	9.0	11.2	14.4	19.4	24.6	32.2	40.8	ASTM D 445
Viscosity Index	105	102	97	98	96	97	98	ASTM D 2270
ISO Viscosity Grade	68	100	150	220	320	460	680	ASTM D 2422
SAE Viscosity Grade	20	30	40	50	N/A	N/A	N/A	SAE J 300
Pour Point °F (°C)	0 (-18)	+9 (-13)	+7 (-14)	+7 (-14)	+7 (-14)	+28 (-2)	+14 (-10)	ASTM D 97
Flash Point °F (°C)	439 (226)	464 (240)	446 (230)	460 (238)	464 (240)	435 (224)	446 (236)	ASTM D 92
Fire Point °F (°C)	471 (224)	500 (260)	500 (260)	500 (260)	496 (258)	500 (260)	504 (262)	ASTM D 92
Pounds per Gallon	7.31	7.36	7.41	7.41	7.44	7.45	7.59	ASTM D 1298
API Gravity	29.7	28.6	27.7	27.0	26.9	25.8	23.8	ASTM D 1298
Specific Gravity	0.8778	0.8838	0.8888	0.8899	0.8933	0.8950	0.9111	ASTM D 1298
Color	Amber	Amber	Amber	Amber	Amber	Amber	Amber	
Evap. Loss, 22 hrs @ 210°F, %	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ASTM D 972
Acidity, mg KOH/g oil	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	ASTM D 974
Water Separability, oil-water-cuff (min)	40-40-0 (10)	40-40-0 (10)	40-40-0 (15)	40-40-0 (15)	39-39-2 (15)	39-39-2 (15)	39-38-3 (15)	ASTM D 1401
Foaming Characteristics								ASTM D 892
Sequence I, II, III	0/0	0/0	0/0	0/0	0/0	0/0	0/0	
Rust Test								ASTM D 665
Method A-Distilled Water	Pass	Pass	Pass	Pass	Pass	Pass	Pass	
Method B-Syn. Sea Water	Pass	Pass	Pass	Pass	Pass	Pass	Pass	
Copper Strip Corrosion	1b (max)	1b (max)	1b (max)	1b (max)	1b (max)	1b (max)	1b (max)	ASTM D 130
Four-Ball Wear, mm	0.40	0.40	0.40	0.40	0.39	0.39	0.38	ASTM D 4172
Timken OK Load, lbs.	60	60	60	60	65	65	65	ASTM D 2782
FZG Rating, Fail Load Stage	12+	12+	12+	12+	12+	12+	12+	DIN 51354
AGMA Classification	2EP	3EP	4EP	5EP	6EP	7EP	8EP	
NSF Reg. No./Cat. Code	130568/H2	130567/H2	130566/H2	130565/H2	130564/H2	130563/H2	110724/H2	

JAX products undergo continual improvement in formulation and manufacture. The values indicated in this PDS are typical production values at the time of this writing. JAX reserves the right to alter and update product data and typical values at any time without notice. It is the responsibility of the installer and/or purchaser to determine if these specifications are adequate and proper for the intended application. MSDS information may be found at www.jax.com or by contacting JAX INC.

CONTAINER SIZE	ISO 68	ISO 100	ISO 150	ISO 220	ISO 320	ISO 460	ISO 680
2000 Pound Tote - 276	13068-276	13100-276	13150-276	13220-276	13320-276	13460-276	13680-276
400 Pound Drum - 400	13068-400	13100-400	13150-400	13220-400	13320-400	13460-400	13680-400
120 Pound Keg - 120	13068-120	13100-120	13150-120	13220-120	13320-120	13460-120	13680-120
35 Pound Pail - 035	13068-035	13100-035	13150-035	13220-035	13320-035	13460-035	13680-035
4/1 Gallon Case - 004	13068-004	13100-004	13150-004	13220-004	13320-004	13460-004	13680-004



JAX INC.

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GEAR LUBES