

JAX PERMA-GEAR SYNTHETIC OILS

HIGH TEMPERATURE, PAG SYNTHETIC E.P.
INDUSTRIAL GEAR OILS



INDUSTRIAL

PRODUCT DESCRIPTION

JAX Perma-Gear Synthetic Gear Oils are state-of-the-art fluids that incorporate the latest developments in 100% synthetic industrial lubrication technology to provide outstanding performance in demanding applications. Due to the inherent properties associated with polyalkylene glycol base fluids, these lubricants exhibit extremely high viscosity indexes and improved lubricity, providing energy savings in gearbox applications.

PRODUCT BENEFITS

- **Extremely High Viscosity Indexes**—The naturally high viscosity indexes, low pour points, and lack of paraffins (wax) 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 or eliminated. At higher operating temperatures, Perma-Gear Synthetic Gear Oils maintain an optimal lubricating film between parts, reducing wear and decreasing unwanted downtime.
- **Improved Lubricity** – The inherent properties of PAG base fluids improves metal wetting and lubricity properties when compared to traditional petroleum fluids. Not only does the metal wetting assure an effective lubricant film, it also provides the lubricity properties which are extremely important in lubricating the sliding worm gear surfaces in worm drive gear cases, where the sliding action of industrial worm gears and extended period of tooth engagement make it difficult to maintain a lubricant film.
- **Increased Drain Intervals** – Formulated using the latest developments in additive technologies, Perma-Gear Synthetic Gear Oils can increase drain intervals 3 to 4 times over traditional petroleum-based fluids.

APPLICATIONS

- Gearbox applications too severe for conventional mineral oil-based lubricants.
- Spur, helical, spiral, bevel, planetary and worm gear applications.

COMPATIBILITY

Talk to your JAX representative for detailed recommendations and specific change-over procedures for converting your industrial gearboxes over to these high-performance, energy-saving synthetic lubricants.

Note: For gearboxes subject to excessive or high water contamination, we recommend JAX Syngear Industrial Gear Oils or JAX Synax EP Gear Oils.



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TYPICAL PROPERTIES	ISO 100	ISO 150	ISO 220	ISO 320	ISO 460	ISO 680	METHOD
Viscosity @ 40°C, cSt	102.6	163.4	225.0	317.0	466.2	661.6	ASTM D 445
Viscosity @ 100°C, cSt	19.9	28.1	37.2	52.0	80.5	111.3	ASTM D 445
Viscosity Index	219	212	217	230	256	267	ASTM D 2270
Pour Point, °F (°C)	-56 (-49)	-38 (-39)	-36 (-38)	-26 (-32)	-18 (-28)	+7 (-14)	ASTM D 97
Flash Point °F (°C)	507 (264)	547 (286)	550 (288)	554 (290)	550 (228)	554 (290)	ASTM D 92
Fire Point °F (°C)	554 (290)	574 (301)	608 (320)	615 (324)	619 (326)	626 (330)	ASTM D 92
Foaming Characteristics							ASTM D 892
Sequence I	0	0	0	0	0	0	
Sequence II	0	0	0	0	0	0	
Sequence III	0	0	0	0	0	0	
Rust Test							ASTM D 665
Method A-Distilled Water	Pass	Pass	Pass	Pass	Pass	Pass	
Method B-Syn. Sea Water	Pass	Pass	Pass	Pass	Pass	Pass	
Copper Strip Corrosion	1b	1b	1b	1b	1b	1b	ASTM D 130
Four-Ball Wear, mm	0.38	0.38	0.38	0.35	0.33	0.30	ASTM D 4172
FZG Spur Gear Test Fail Load Stage	12+	12+	12+	12+	12+	12+	DIN 51354
Timken OK Load, lbs.	45	45	45	45	60	60	ASTM D 2782

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 100	ISO 150	ISO 220	ISO 320	ISO 460	ISO 680
2000 Pound Tote	PMGRL-276	PMGRM-276	PMGRN-276	PMGRP-276	PMGRQ-276	PMGRR-680
400 Pound Drum	PMGRL-400	PMGRM-400	PMGRN-400	PMGRP-400	PMGRQ-400	PMGRR-400
120 Pound Keg	PMGRL-120	PMGRM-120	PMGRN-120	PMGRP-120	PMGRQ-120	PMGRR-120
35 Pound Pail	PMGRL-035	PMGRM-035	PMGRN-035	PMGRP-035	PMGRQ-035	PMGRR-035
4-1 Gallon Case	PMGRL-004	PMGRM-004	PMGRN-004	PMGRP-004	PMGRQ-004	PMGRR-004


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