

JAX PERMA-GEAR FG GEAR OILS

NSF H1 HIGH TEMPERATURE SYNTHETIC GEAR OILS



FOOD GRADE

PRODUCT DESCRIPTION

JAX Perma-Gear FG Gear Oils are polyalkylene glycol based fluids that exhibit extremely high viscosity indexes, improved lubricity, and provide meaningful energy savings in gearbox applications.

JAX Perma-Gear FG Fluids meet the requirements of 21 CFR 178.3570 (lubricants with incidental food contact).

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 FG Gear Oils maintain an optimal lubricating film between parts, reducing wear and decreasing unwanted downtime.
- **Improved Lubricity** – Improved metal wetting assures an effective lubricant film and 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, JAX Perma-Gear FG Gear Oils often increase drain intervals 3 to 4 times over traditional petroleum based fluids, based on used oil analysis.
- **NSF H1 Registered**
- **Kosher and Parve Certified**

APPLICATIONS

- Recommended for gearbox applications too severe for conventional mineral oil based lubricants
- High film strength offers excellent lubricity for 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 Magna-Plate® FG Gear Oils or JAX Flow-Guard Synthetic Fluids



JAX PERMA-GEAR FG FLUIDS

TYPICAL PROPERTIES	PERMA-GEAR ISO 150	PERMA-GEAR ISO 220	PERMA-GEAR ISO 320	PERMA-GEAR ISO 460	PERMA-GEAR ISO 680	METHOD
Viscosity @ 40°C, cSt	163.4	225.0	317.0	466.2	670.5	ASTM D 445
Viscosity @ 100°C, cSt	28.1	37.2	52.0	80.5	113.2	ASTM D 445
Viscosity Index	212	217	230	256	269	ASTM D 2270
Pour Point, °F (°C)	-38 (-39)	-36 (-38)	-26 (-32)	-18 (-28)	+7 (-14)	ASTM D 97
Flash Point, °F (°C)	547 (286)	550 (288)	554 (290)	550 (288)	554 (290)	ASTM D 92
Fire Point, °F (°C)	574 (301)	608 (320)	615 (324)	619 (326)	626 (330)	ASTM D 92
Copper Strip Corrosion	1b	1b	1b	1b	1b	ASTM D 130
Rust Inhibition						ASTM D 665
Method A - Distilled Water	Pass	Pass	Pass	Pass	Pass	
Method B - Syn. Sea Water	Pass	Pass	Pass	Pass	Pass	
Four-Ball Wear, mm	0.38	0.38	0.35	0.33	0.30	ASTM D 4172
Foaming Characteristics						ASTM D 892
Sequence I	0	0	0	0	0	
Sequence II	0	0	0	0	0	
Sequence III	0	0	0	0	0	
FZG Spur Gear Test						DIN 51354
Fail Load Stage	12+	12+	12+	12+	12+	
Timken OK Load, lbs.	45	45	45	60	60	ASTM D 2782
NSF Reg. No./ Category Code	140278/H1	140279/H1	140280/H1	140281/H1	140282/H1	
Replacement Lubricant for:	Magna-Plate 80W90FG	Magna-Plate 85W140FG	Magna-Plate 85W140FG	Magna-Plate 250FG		

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. SDS information may be found at www.jax.com or by contacting JAX INC.

CONTAINER SIZE	PERMA-GEAR ISO 150	PERMA-GEAR ISO 220	PERMA-GEAR ISO 320	PERMA-GEAR ISO 460	PERMA-GEAR ISO 680
2000 Pound Tote	PGFGM-276	PGFGN-276	PGFGP-276	PGFGQ-276	PGFGR-276
400 Pound Drum	PGFGM-400	PGFGN-400	PGFGP-400	PGFGQ-400	PGFGR-400
120 Pound Keg	PGFGM-120	PGFGN-120	PGFGP-120	PGFGQ-120	PGFGR-120
35 Pound Pail	PGFGM-035	PGFGN-035	PGFGP-035	PGFGQ-035	PGFGR-035
4-1 Gallon Case	PGFGM-004	PGFGN-004	PGFGP-004	PGFGQ-004	PGFGR-004



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