

JAX FLOW-GUARD SYNTHETIC FLUIDS

**100% PAO-BASED SYNTHETIC, FG-H1
FOOD-GRADE LUBRICATING FLUIDS**



PRODUCT DESCRIPTION

JAX Flow-Guard Synthetic Series food-grade gear oils are formulated with 100% PAO base fluids and the best available additive technologies to provide superior performance over any competitive food-grade lubricating oils. Not only do these fluids serve as a medium for energy transfer, but also as the lubricant, sealant, and heat transfer fluid for the components. As gear oils, they must also maximize power and efficiency by minimizing component wear and system “downtime”. Critical performance features include improved sealing effect, reduced adhesive and starting friction, reduced operational wear and minimal sludge or deposit generation.

In addition to outstanding gear oil performance, these products satisfy many other lubrication requirements in food-processing environments. JAX Flow-Guard Synthetic Fluids contain an effective combination of antiwear agents, rust inhibitors, and polymeric viscosity index modifiers that provide outstanding long-term wear advantages over other food-grade oils, while their robust antioxidant chemistry ensures deposit-free operation. JAX Flow-Guard Synthetic Fluids meet the requirements of 21 CFR 178.3570 (lubricants with incidental food contact).

PRODUCT BENEFITS

- **Excellent High- and Low-Temperature Performance**—JAX Flow-Guard Synthetic Fluids can be used in extremely low ambient temperatures, yet maintain sufficient body to perform at high temperatures. These fluids pass demanding industry standard antiwear performance tests at levels previously relegated to high-performance nonfood-grade gear oils. This can ease concerns when converting your gear oils to USDA/NSF H1 food-grade integrity. By replacing your lower performing food-grade gear oil with JAX Flow-Guard Synthetic Fluids, you will extend the life and lubrication intervals of your costly equipment.
- **Wear Protection**— JAX Flow-Guard Synthetic Fluids have been specifically formulated to provide enhanced wear protection. Studies have shown that the additive chemistry in JAX Flow-Guard Synthetic Fluids reduces wear by up to 95% over conventional R&O gear oils, dramatically increasing pump life.

- **Longer Drain Interval**— JAX Flow-Guard Synthetic Fluids Series fluids outperform conventional fluids in thermal and oxidative stability, as demonstrated by the Rotating Pressure Vessel Oxidation Test (ASTM D 2272). This enhanced performance translates into longer drain intervals and trouble-free operation.
- **Water Separation and Air Entrainment**—JAX Flow-Guard Synthetic Fluids readily separate from water and air, eliminating emulsions that inhibit the oil’s ability to lubricate, and minimizing hydraulic “fade” to ensure maximum efficiency. Rapid water separation ensures easy drainage from the sump, reducing the potential for rust and corrosion to the system components.

APPLICATION

JAX Flow-Guard Synthetic Series food grade fluids are formulated for use in industrial hydraulic, gear drive and other lubricated machinery performing a variety of critical functions. Applications include gearboxes, mist or spray chain lubricators, cam rollers, slide valves, drip lubrication systems, air compressors, oil bearings, or anywhere an NSF H1-registered lubricant must be used.

COMPATIBILITY

JAX Flow-Guard Synthetic Series is compatible with mineral oils and most synthetic oils*. For optimum performance, it is recommended that the system be thoroughly drained and, if warranted, cleaned prior to installation.

*JAX Flow-Guard Synthetic Series, as well as other synthetic or mineral-based oils, are not compatible with polyglycol-type gear lubricants. Thorough flushing prior to changeover is required.



GEAR LUBES

JAX FLOW-GUARD SYNTHETIC FLUIDS



PERFORMANCE FEATURES AND BENEFITS

- Superior Low-Temperature Performance from PAO Base Fluids
- Resists the Formation of Foam, Sludge, Varnish and Corrosive Acids
- Superior Rust and Oxidation Stability for Long, Trouble-Free life
- Hydrolytically Stable and Readily Separates from Water
- Recommended for Gear and Vane Pumps
- Excellent R&O, Gear, and Bearing Performance
- USDA/NSF H1 Registered
- Kosher and Parve Certified

TYPICAL PROPERTIES	ISO 100 (FGS100)	ISO 150 (FGS150)	ISO 220 (FGS220)	ISO 320 (FGS320)	ISO 460 (FGS460)	ISO 680 (FGS680)	METHOD
Viscosity @ 40°C, cSt	104.1	150.8	227.4	311.3	445.2	668.7	ASTM D 445
Viscosity @ 100°C, cSt	14.0	18.1	24.3	30.2	40.3	51.2	ASTM D 445
Viscosity Index	136	134	134	133	139	132	ASTM D 2270
ISO Viscosity Grade	100	150	220	320	460	680	ASTM D 2422
Pour Point, °F (°C)	-44 (-42)	-40 (-40)	-29 (-34)	-30 (-34)	-20 (-29)	+10 (-12)	ASTM D 97
Flash Point, °F (°C)	464 (240)	468 (242)	464 (240)	478 (248)	570 (299)	580 (304)	ASTM D 92
Fire Point, °F (°C)	543 (284)	536 (280)	518 (270)	522 (272)	575 (302)	590 (310)	ASTM D 92
Color	Water white	Water white	Water white	Water white	Water white	Water white	
TOST Life, Hours	10,000+	10,000+	10,000+	10,000+	10,000+	10,000+	ASTM D 943
Water Sep. oil-water-cuff (min)	40-40-0 (15)	40-40-0 (15)	40-40-0 (20)	40-40-0 (20)	40-40-0 (20)	40-40-0 (20)	ASTM D 1401
Foaming Characteristics Seq I/II/III							ASTM D 892
Sequence I	10/0	10/0	8/0	12/0	10/0	12/0	
Sequence II	6/0	6/0	8/0	8/0	12/0	8/0	
Sequence III	6/0	8/0	6/0	10/	8/0	12/0	
Rust Test							ASTM D 665
Method A - Distilled Water	Pass	Pass	Pass	Pass	Pass	Pass	
Method B - Synthetic Sea Water	Pass	Pass	Pass	Pass	Pass	Pass	
Copper Strip Corrosion	1a	1a	1a	1a	1a	1a	ASTM D 130
Four-Ball Wear, mm	0.40	0.40	0.40	0.38	0.35	0.35	ASTM 4172
FZG Rating, Fail Load Stage	12+	12+	12+	12+	12+	12+	DIN 51354
AGMA Classification	3S	4S	5S	6S	7S	8S	
NSF Registration No./Cat. Code	129242/H1	129243/H1	129247/H1	129244/H1	129246/H1	129245/H1	

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
275 Gallon Tote - 275	FGS100-275	FGS150-275	FGS220-275	FGS320-275	FGS460-275	FGS680-275
55 Gallon Drum - 055	FGS100-055	FGS150-055	FGS220-055	FGS320-055	FGS460-055	FGS680-055
16 Gallon Keg - 016	FGS100-016	FGS150-016	FGS220-016	FGS320-016	FGS460-016	FGS680-016
5 Gallon Pail - 005	FGS100-005	FGS150-005	FGS220-005	FGS320-005	FGS460-005	FGS680-005
4-1 Gallon Case - 004	FGS100-004	FGS150-004	FGS220-004	FGS320-004	FGS460-004	FGS680-004



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