

# JAX FLOW-GUARD SYNTHETIC FLUIDS

NSF H1 100% PAO-BASED SYNTHETIC LUBRICATING FLUIDS



**FOOD GRADE**

## PRODUCT DESCRIPTION

JAX Flow-Guard Synthetic Fluids are compounded with 100% PAO base fluids and the best available additive technologies to provide superior performance. In addition to their outstanding hydraulic performance, these products satisfy many other lubrication requirements in food processing environments.

They 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 hydraulic oils, while their robust antioxidant chemistry ensures deposit-free operation. By replacing your lower performing food grade hydraulic oil with JAX Flow-Guard Synthetic Fluids, you will extend the life and lubrication intervals of your costly equipment. 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**—Can be used at extremely low ambient temperatures, yet maintain sufficient body to perform at high temperatures. These fluids pass demanding industry-standard vane pump hydraulic oil tests at a level previously relegated to high-performance non-food grade hydraulic oils. This can ease concerns when converting your hydraulic systems to NSF H1 food grade integrity.
- **Reduces Wear**—Specifically formulated to provide enhanced wear protection over conventional rust and oxidation hydraulic oils, dramatically increasing pump life.
- **Longer Drain Intervals**—Outperforms conventional fluids in thermal and oxidative stability, as demonstrated by the Rotary Pressure Vessel Oxidation Test (ASTM D 2272). This enhanced performance translates into longer drain intervals and trouble free operation.
- **Water Separation and Air Entrainment**—Readily separates 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.
- **Micronox® Technology**—A groundbreaking advance in food grade technology with exceptional performance in preserving and protecting food grade lubricants from microbial contamination.
- **NSF H1 Registered**
- **Kosher and Parve Certified**

## APPLICATIONS

- Industrial hydraulic, gear drive and other lubricated machinery
- Hydraulic systems
- Mist or spray chain lubricators
- Cam rollers
- Slide valves
- Drip lubrication systems
- Air compressors
- Oil bearings
- Gearboxes

## 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.*



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TYPICAL PROPERTIES	FLOW-GUARD ISO 100	FLOW-GUARD ISO 150	FLOW-GUARD ISO 220	FLOW-GUARD ISO 320	FLOW-GUARD ISO 460	FLOW-GUARD ISO 680	ASTM 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 Reg. 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. SDS information may be found at [www.jax.com](http://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	FGS100-275	FGS150-275	FGS220-275	FGS320-275	FGS460-275	FGS680-275
55 Gallon Drum	FGS100-055	FGS150-055	FGS220-055	FGS320-055	FGS460-055	FGS680-055
16 Gallon Keg	FGS100-016	FGS150-016	FGS220-016	FGS320-016	FGS460-016	FGS680-016
5 Gallon Pail	FGS100-005	FGS150-005	FGS220-005	FGS320-005	FGS460-005	FGS680-005
Gallon (4/cs)	FGS100-004	FGS150-004	FGS220-004	FGS320-004	FGS460-004	FGS680-004



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