



Food Machinery Oil

Food Machinery Oil is a premium quality, ashless food-grade lubricant specially developed for the lubrication of machinery in food processing and beverage plants where incidental food contact may occur. Typical applications include chain drives, conveyor bearings, hydraulic systems, circulating systems, rotary air compressors, air-line lubricators and moderately loaded enclosed gears.

Food Machinery Oil is available in six viscosity grades: ISO 32, 46, 68, 100, 220 and 460. It is blended with the highest-quality USP white oils. It is fortified with an ashless, zinc-free antiwear additive and rust and oxidation inhibitors to provide excellent wear protection, corrosion resistance and deposit control to ensure long service life for hydraulic pumps and motors and other equipment.

Food Machinery Oil meets FDA requirements and 1998 USDA H1 guidelines for incidental food contact. It is registered by NSF International as an H1 lubricant. It also meets the requirements of the leading hydraulic pump manufacturers, including Denison Hydraulics and Vickers (Eaton).

Applications

- Bakeries, canneries and beverage plants
- Food processing and meat packing plants
- Lubrication of chain drives
- Moderately loaded industrial gearboxes
- Equipment on offshore oil platforms
- Deep well water pumps
- Rotary air compressors
- Air-line lubricant for air tools and other air-actuated equipment

Food Machinery Oil meets the requirements of:

- FDA 21 CFR 178.3570 for incidental food contact
- NSF International and former 1998 USDA H1 for incidental food contact
- Kosher, Pareve and Halal

Features/Benefits

- Excellent wear protection for critical system components
- Good oxidation resistance to minimize sludge and varnish formation

Premium Food-Grade Machinery Oil; NSF H-1 Registered

Contact Information

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- Protects against rust and corrosion
- Good water-separating characteristics to minimize the formation of emulsions
- Good foam resistance

Food Machinery Oil

Typical Properties

ISO Grade	32	46	68	100	220	460
Specific Gravity @ 15.6°C (60°F)	0.865	0.868	0.871	0.877	0.876	0.883
Density, lbs/gal	7.22	7.24	7.27	7.30	7.31	7.35
Color, ASTM D1500	0.5	0.5	0.5	0.5	0.5	0.5
Color, Saybolt	+30	+30	+30	+30	+30	+30
Flash Point (COC), °C (°F)	204 (400)	216 (420)	221 (430)	221 (430)	263 (505)	263 (505)
Pour Point, °C (°F)	-9 (15)	-9 (15)	-9 (15)	-9 (15)	-9 (15)	-9 (15)
Viscosity,						
cSt @ 40°C	32	46	68	100	220	460
cSt @ 100°C	5.5	7.0	9.1	11.9	22.0	38.0
SUS @ 100°F	165	237	351	520	1,151	2,428
SUS @ 210°F	45	50	57	67	110	125
Viscosity Index	110	110	109	105	120	126
Acid Number, ASTM D974, mg KOH/g	0.05	0.05	0.05	0.05	0.05	0.05
Copper Corrosion, ASTM D130	1a	1a	1a	1a	1a	1a
Demulsibility, ASTM D1401, minutes to pass	30	30	30	30	30	30
Foam Test, ASTM D892	Pass	Pass	Pass	Pass	Pass	Pass
Four-Ball Wear, ASTM D4172, Scar Diameter, mm	0.55	0.53	0.50	0.50	0.50	0.50
FZG Gear Test, ASTM D5182, Pass Load Stage	11	11	11	11	11	11
Oxidation Stability,						
TOST, ASTM D943, hrs	3,000	3,000	3,000	3,000	3,000	3,000
RPVOT, ASTM D2272, minutes	480	480	480	480	450	450
Rust Test, ASTM D665 A&B	Pass	Pass	Pass	Pass	Pass	Pass

Health and Safety Information

For recommendations on safe handling and use of this product, please refer to the Material Safety Data Sheet via <http://w3.conocophillips.com/NetMSDS>.

Due to continual product research and development, the information contained herein is subject to change without notification.

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