



ISO-9001 Registered Quality System.  
ISO-21469 Compliant.

### Sales, Service & Distribution Center

Newark, NJ 07105

Phone: 973-589-9150 Fax: 973-589-4432

### Manufacturing, Sales, Service & Distribution Center

Toledo, OH 43605

Phone: 419-691-2491 Fax: 419-693-3806

### Sales and Tech Service Support

Phone: 1-800-733-4755

## PRODUCT DATA

# LUBRIPLATE FMO-AW LUBRICANTS

"These products are certified OU Kosher Pareve"

"These products are Halal certified"

\*NSF International H-1 & HT1 Registered  
NSF ISO21469 Certification

## DESCRIPTION

The LUBRIPLATE FMO-AW Series of Lubricants was developed to meet the ever-increasing demands of pressure, speed and temperature that are placed on modern food machinery. These premium food machinery lubricants are formulated with non-toxic, USP white mineral oils and are fortified with anti-oxidants, corrosion inhibitors, anti-wear agents and foam suppressants. The NSF International has registered them as H-1 lubricants, covering incidental contact with food. As such, they are acceptable as lubricants and anti-rust films on equipment and machine parts used in locations where there is exposure to edible products. These oils are all zinc-free.

## APPLICATIONS

- ⇒ Hydraulics
- ⇒ Chains
- ⇒ Gearboxes
- ⇒ Air Line Lubricators
- ⇒ General Oiling

## ADVANTAGES

- ⇒ Fortified with maximum strength antioxidant and are thermally and oxidatively stable.

## APPROVALS

**LUBRIPLATE FMO-2400-AW & FMO-1100-AW have been tested and have passed the:**

- ⇒ 12 Stage Four Square Gear (FZG) Test.

**LUBRIPLATE FMO-350-AW has passed the following hydraulic pump tests:**

- ⇒ Vickers 35VQ25 Vane Pump Test
- ⇒ Vickers V-104C Vane Pump Test
- ⇒ Racine Model "S" Variable Volume Vane Pump Test

**And meet the following specifications:**

- ⇒ Vickers M-2950-S
- ⇒ Vickers I-286-S

**LUBRIPLATE FMO-200-AW has also been tested against and passed:**

- ⇒ Racine Model "S" Variable Volume Vane Pump Test

\*Registered H-1 by NSF International for use in food processing facilities as a lubricant or anti-rust agent on equipment in which there may be incidental contact involving the lubricated part and the edible product.

The **LUBRIPLATE FMO-AW Series** contain no components derived from TSE/BSE relevant animal species; therefore, they are compliant with the requirements of the TSE Note for Guidance EMA/410/01 Rev. 3 July 2011.

## Typical Test Data – See back

### PACKAGING AVAILABLE

	<u>85-AW</u>	<u>150-AW</u>	<u>200-AW</u>
Carton, 12/1 Quart Plastic Jugs	L0880-054	L0879-054	***
Carton, 4/1 Gallon Plastic Jugs	L0880-057	L0879-057	L0881-057
5 Gallon Pail	L0880-060	L0879-060	L0881-060
16 Gallon Drum	L0880-061	L0879-061	L0881-061
55 Gallon Drum	L0880-062	L0879-062	L0881-062
Carton, 12/12 oz. Aerosol Cans	***	***	***
Carton, 12/14 oz. Non-Aerosol Cans	L0880-067	***	***

### PACKAGING AVAILABLE

	<u>350-AW</u>	<u>500-AW</u>	<u>900-AW</u>
Carton, 12/1 Quart Plastic Jugs	***	***	***
Carton, 4/1 Gallon Plastic Jugs	L0882-057	L0883-057	L0884-057
5 Gallon Pail	L0882-060	L0883-060	L0884-060
16 Gallon Drum	L0882-061	L0883-061	L0884-061
55 Gallon Drum	L0882-062	L0883-062	L0884-062
Carton, 12/12 oz. Aerosol Cans	L0882-063	***	

### PACKAGING AVAILABLE

	<u>1100-AW</u>	<u>1700-AW</u>
Carton, 12/1 Quart Plastic Jugs	***	L0887-054
Carton, 4/1 Gallon Plastic Jugs	L0886-057	L0887--057
5 Gallon Pail	L0886-060	L0887--060
16 Gallon Drum	L0886-061	L0887--061
55 Gallon Drum	L0886-062	L0887--062

### PACKAGING AVAILABLE

	<u>2400-AW</u>	<u>3800-AW</u>
Carton, 12/1 Quart Plastic Jugs	***	***
Carton, 4/1 Gallon Plastic Jugs	L0885-057	L0888-057
5 Gallon Pail	L0885-060	L0888-060
16 Gallon Drum	L0885-061	L0888-061
55 Gallon Drum	L0885-062	L0888-062

**\*NSF International H-1 Registration No.'s (Meets former USDA 1998 Guidelines)**

(85-AW)	(150-AW)	(200-AW)	(350-AW)	(500-AW)
122670	132661	122668	122665	122664
(900-AW)	(1100-AW)	(1700-AW)	(2400-AW)	(3800-AW)
122675	122687	122667	122671	122673

**NSF International HT1 Registration No. (FMO-150-AW)**

132661

Typical tests for LUBRIPLATE FMO-AW LUBRICANTS are as follows:

PROPERTY	TEST METHOD	TYPICAL RESULTS*				
		85-AW	150-AW	200-AW	350-AW	500-AW
Viscosity SUS @ 100°F	ASTM D-2161	102.3	146	195.9	347	545
Viscosity SUS @ 210°F	ASTM D-2161	39.5	43.6	47.5	55	70
Viscosity cSt @ 40°C	ASTM D-445	21.26	31.39	46.92	64.61	94.8
Viscosity cSt @ 100°C	ASTM D-445	3.95	5.41	6.92	8.52	11.03
Viscosity Index	ASTM D-2270	107	107	103	102	101
Color	ASTM D-1500	L0.5	L0.5	L0.5	L0.5	L0.5
Gravity	ASTM D-287	29.0	32.5	32.3	31.9	31.4
Flash Point	ASTM D-92	345°F/174°C	400°F/204°C	455°F/235°C	480°F/249°C	500°F/260°C
Fire Point	ASTM D-92	365°F/185°C	450°F/232°C	490°F/254°C	515°F/268°C	555°F/291°C
Pour Point	ASTM D-97	-30°F/-34°C	-20°F/-29°C	-15°F/-26°C	-10°F/-23°C	5°F/-15°C
Neutralization No.	ASTM D-2896	0.8	0.8	0.8	0.8	0.8
Aniline Point, °F	ASTM D-611	209	215	230	235	258
ISO Viscosity Grade	ASTM D-2422	22	32	46	68	100
AGMA No.		***	***	1	2	3
4-Ball Wear Test	ASTM D-2266	.43 mm	.39 mm	.41 mm	.36 mm	.38 mm
Turbine Oil Oxidation Test	ASTM D-5846	10,000+	Pending	10,000+	10,000+	10,000+
		900-AW	1100-AW	1700-AW	2400-AW	3800-AW
Viscosity SUS @ 100°F	ASTM D-2161	856	1126	1730	2350	3864
Viscosity SUS @ 210°F	ASTM D-2161	83	97	120	142	198
Viscosity cSt @ 40°C	ASTM D-445	163.5	206.7	300.7	428.9	700.1
Viscosity cSt @ 100°C	ASTM D-445	16.09	18.47	23.25	29.62	40.98
Viscosity Index	ASTM D-2270	102	99	96	98	98
Color	ASTM D-1500	L0.5	L0.5	L0.5	L0.5	0
Gravity	ASTM D-287	31.0	30.5	29.5	28.6	28.3
Flash Point	ASTM D-92	475°F/246°C	455°F/235°C	440°F/227°C	445°F/229°C	425°F/218°C
Fire Point	ASTM D-92	530°F/277°C	510°F/266°C	490°F/254°C	490°F/254°C	475°F/246°C
Pour Point	ASTM D-97	5°F/-15°C	10°F/-12°C	10°F/-12°C	15°F/-10°C	20°F/-7°C
Neutralization No.	ASTM D-2896	0.8	0.8	0.8	0.8	0.8
Aniline Point, °F	ASTM D-611	259	262	265	269	275
ISO Viscosity Grade	ASTM D-2422	150	220	320	460	680
AGMA No.		4	5	6	7	8
4-Ball Wear Test	ASTM D-2266	.38 mm	.38 mm	.38 mm	.38 mm	.38 mm
Turbine Oil Oxidation Test	ASTM D-5846	10,000+	10,000+	10,000+	8,000+	5,000+

\*Values for typical results are for information only and can vary; these are not specifications.

Slight variations in product color may occur due to storage temperature and exposure to light. Product color has no impact on the lubricant's performance or to the food safety rating of this NSF H1 and ISO21469 certified product.

