

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

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PRODUCT DATA

LUBRIPLATE SPO LUBRICANTS

DESCRIPTION

LUBRIPLATE SPO Lubricants provide a tacky, superior lubricating film for high-sliding action in worm, bevel, helical and spur gears as well as machine ways, chains etc. This series of mineral oil based products will reduce friction and heat, thus improving efficiency. The anti-wear properties are compatible with brass, bronze and silver-alloy metals. They are excellent for areas of high moisture, heat and load found in many industries ranging from quarries and mills to food processing plants.

ADVANTAGES

- ⇒ Reduce friction, wear and lower operating temperatures, thus reducing power consumption and lowering maintenance costs.
- ⇒ Provide excellent oxidation and thermal stability which retards the formation of acidic contaminants, carbonaceous material and increased viscosities, thus extending fluid life.
- ⇒ Provide excellent demulsibility and filterability, thus allowing water and contaminants to be easily removed.
- ⇒ Provide an anti-wear, tacky, cohesive lubricant film protecting all metal surfaces against rust and corrosion and protects copper and copper alloys from chemical attack by contaminants.
- ⇒ Provides lubricant consolidation, e.g. one oil for gear boxes, bearings and ways.
- ⇒ Provide seal compatibility.

PERFORMANCE

SPO-288 has been field tested and approved by Cone Drive for double-enveloping worm gear applications. This is the only mineral oil approved that does not contain extreme pressure additives or acidless tallow.

SPO-277 passes the FZG 12 Stage Gear Oil Test.

SPO-266 provides exceptional wear protective qualities carrying a .41 mm wear factor on the 4-Ball Wear Test. (40 kg., 1 hr., 1200 rpm's, $167^{\circ}F$)

The "**SPO**" **Series** has proven very successful against synthetic gear oils by lowering temperatures, extending drain intervals, yet costing much less.



Typical Test Data – See Back

APPLICATIONS

LUBRIPLATE SPO Lubricants are specially designed for a wide variety of industrial applications such as gear cases, machine ways, chains and general purpose lubrication. These oils will provide a long-lasting wear resistant film that reduces friction and heat. The polar affinity of SPO protects metal surfaces from rust and corrosion as well as chemical corrosion. These oils have excellent demulsibility, oxidation resistance and thermal stability, thus extending lubricant life.

PACKAGING AVAILABLE	SPO-222	SPO-233	SPO-244
Carton, 4/7 lb. Cans	L0242-007	L0243-007	L0244-007
Carton, 12/2 lb. Plastic Bottles	L0242-013	L0243-013	L0244-013
35 lb. Pail	L0242-035	L0243-035	L0244-035
120 lb. Quarter Size Drum	L0242-039	L0243-039	L0244-039
Full Size Drum	L0242-040	L0243-040	L0244-040
PACKAGING AVAILABLE	SPO-255	SPO-266	SPO-277
Carton, 4/7 lb. Cans	L0245-007	L0246-007	L0247-007
Carton, 12/2 lb. Plastic Bottles	L0245-013	L0246-013	L0247-013
35 lb. Pail	L0245-035	L0246-035	L0247-035
120 lb. Quarter Size Drum	L0245-039	L0246-039	L0247-039
Full Size Drum	L0245-040	L0246-040	L0247-040
PACKAGING AVAILABLE	SPO-288	SPO-299	
Carton, 4/7 lb. Cans	L0248-007	L0249-007	
Carton, 12/2 lb. Plastic Bottles	L0248-013	L0249-013	
35 lb. Pail	L0248-035	L0249-035	
120 lb. Quarter Size Drum	L0248-039	***	
Full Size Drum	L0248-040	L0249-040	

PROPERTY	TEST METHOD	TYPICAL RESULTS*				
		SPO-222	SPO-233	SPO-244	SPO-255	
Viscosity SUS @ 100°F	ASTM D-2161	317	464	685	1044	
Viscosity cSt @ 40°C	ASTM D-445	63	91	135	200	
Viscosity SUS @ 210°F	ASTM D-2161	55	63	75	95	
Viscosity cSt @ 100°C	ASTM D-445	9	11	14	19	
Viscosity Index	ASTM D-2270	109	103	102	103	
API Gravity	ASTM D-287	30.8	30.0	29.9	29.3	
Color	ASTM D-1500	L-2	L-2.5	L-3	L-3	
Flash Point	ASTM D-92	415°F/213°C	450°F/232°C	460°F/238°C	465°F/241°C	
Fire Point	ASTM D-92	465°F/240°C	500°F/260°C	525°F/274°C	560°F/293°C	
Pour Point	ASTM D-97	-30°F/-34°C	-35°F/-37°C	-25°F/-31°C	-10°F/-23°C	
AGMA		2	3	4	5	
ISO		68	100	150	220	
DRODEDTY		TYPICAL RESULTS*				
PROPERTY	TEST METHOD		I TPICAL I	KEJULIJ"		
PROPERTY	IESI METHOD	SPO-266	SPO-277	SP0-288	SPO-299	
Viscosity SUS @ 100°F	ASTM D-2161	SPO-266 1476	-		SPO-299 5050	
			SPO-277	SPO-288		
Viscosity SUS @ 100°F	ASTM D-2161	1476	SPO-277 2260	SPO-288 3314	5050	
Viscosity SUS @ 100°F Viscosity cSt @ 40°C	ASTM D-2161 ASTM D-445	1476 280	SPO-277 2260 432	SPO-288 3314 628	5050 950	
Viscosity SUS @ 100°F Viscosity cSt @ 40°C Viscosity SUS @ 210°F	ASTM D-2161 ASTM D-445 ASTM D-2161	1476 280 115	SPO-277 2260 432 148	SPO-288 3314 628 184	5050 950 244	
Viscosity SUS @ 100°F Viscosity cSt @ 40°C Viscosity SUS @ 210°F Viscosity cSt @ 100°C	ASTM D-2161 ASTM D-445 ASTM D-2161 ASTM D-445	1476 280 115 23	SPO-277 2260 432 148 30	SPO-288 3314 628 184 38	5050 950 244 50	
Viscosity SUS @ 100°F Viscosity cSt @ 40°C Viscosity SUS @ 210°F Viscosity cSt @ 100°C Viscosity Index	ASTM D-2161 ASTM D-445 ASTM D-2161 ASTM D-445 ASTM D-2270	1476 280 115 23 102	SPO-277 2260 432 148 30 98	SPO-288 3314 628 184 38 98	5050 950 244 50 98	
Viscosity SUS @ 100°F Viscosity cSt @ 40°C Viscosity SUS @ 210°F Viscosity cSt @ 100°C Viscosity Index API Gravity	ASTM D-2161 ASTM D-445 ASTM D-2161 ASTM D-445 ASTM D-2270 ASTM D-287	1476 280 115 23 102 26.5	SPO-277 2260 432 148 30 98 25.8	SPO-288 3314 628 184 38 98 26.9	5050 950 244 50 98 27.5	
Viscosity SUS @ 100°F Viscosity cSt @ 40°C Viscosity SUS @ 210°F Viscosity cSt @ 100°C Viscosity Index API Gravity Color	ASTM D-2161 ASTM D-445 ASTM D-2161 ASTM D-445 ASTM D-2270 ASTM D-287 ASTM D-1500	1476 280 115 23 102 26.5 L-3.5	SPO-277 2260 432 148 30 98 25.8 L-4	SPO-288 3314 628 184 38 98 26.9 L-5.5	5050 950 244 50 98 27.5 L-4.5	
Viscosity SUS @ 100°F Viscosity cSt @ 40°C Viscosity SUS @ 210°F Viscosity cSt @ 100°C Viscosity Index API Gravity Color Flash Point	ASTM D-2161 ASTM D-445 ASTM D-2161 ASTM D-445 ASTM D-2270 ASTM D-287 ASTM D-1500 ASTM D-92	1476 280 115 23 102 26.5 L-3.5 470°F/243°C	SPO-277 2260 432 148 30 98 25.8 L-4 475°F/246°C	SPO-288 3314 628 184 38 98 26.9 L-5.5 425°F/218°C	5050 950 244 50 98 27.5 L-4.5 450°F/232°C	
Viscosity SUS @ 100°F Viscosity cSt @ 40°C Viscosity SUS @ 210°F Viscosity cSt @ 100°C Viscosity Index API Gravity Color Flash Point Fire Point	ASTM D-2161 ASTM D-445 ASTM D-2161 ASTM D-445 ASTM D-2270 ASTM D-287 ASTM D-1500 ASTM D-92 ASTM D-92	1476 280 115 23 102 26.5 L-3.5 470°F/243°C 570°F/299°C	SPO-277 2260 432 148 30 98 25.8 L-4 475°F/246°C 580°F/304°C	SPO-288 3314 628 184 38 98 26.9 L-5.5 425°F/218°C 525°F/274°C	5050 950 244 50 98 27.5 L-4.5 450°F/232°C 505°F/263°C	

Typical tests for LUBRIPLATE SPO LUBRICANTS are as follows:

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