



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

LUBRIPLATE SYN LUBE HD SERIES ISO VG 150 - 680

LUBRIPLATE SYN LUBE HD SERIES ISO VG 150 - 680 fluids are high performance, extreme pressure synthetic fluids for industrial machine applications. These fluids are 100% synthetic based products formulated with a combination of PAO and ester technology. They are zinc-free.

LUBRIPLATE SYN LUBE HD SERIES ISO VG 150 - 680 fluids are available in (5) ISO Viscosity Grades (ISO VG 150, 220, 320, 460, 680) and are designed for many extreme and stringent applications.

LUBRIPLATE SYN LUBE HD SERIES ISO VG 150 - 680 fluids are excellent gear and bearing lubricants for use under severe conditions such as extremely high or low temperatures and whenever an extreme pressure fortified synthetic fluid is required.

LUBRIPLATE SYN LUBE HD SERIES ISO VG 150 - 680 fluids provide several advantages over mineral oil based products.

- Excellent thermal stability and oxidation resistant characteristics increasing the service life of the lubricant many times over that of mineral oils.
- Outstanding extreme pressure and anti-wear properties resulting in extended drain intervals and longer equipment life.
- Exceptional demulsibility characteristics.
- High viscosity indexes and low pour points to ensure optimum performance over a wide operating temperature range.
- Broad range of compatibility with elastomers and seal materials.
- Exhibit very low coefficients of friction and superior heat transfer characteristics, resulting in lower operating temperatures and reduced power consumption.

(Over)

LUBRIPLATE SYN LUBE HD Series ISO VG 150 - 680 Typical Properties

<u>Physical Characteristics</u>	<u>ASTM</u>	<u>Syn Lube HD 150</u>	<u>Syn Lube HD 220</u>	<u>Syn Lube HD 320</u>	<u>Syn Lube HD 460</u>	<u>Syn Lube HD 680</u>
Viscosity @ 40°C cSt	D-445	162	199	310	440	705
Viscosity @ 100°C cSt	D-445	21	25	35	47	68
Viscosity @ 100°F	D-445	816	988	1545	2191	3384
Viscosity Index	D-2270	154	154	157	164	170
Pour Point °F/°C	D-97	-60/-51	-55/-48	-50/-46	-50/-46	-45/-43
Flash Point °F/°C	D-92	540/282	540/282	540/282	550/288	555/291
Fire Point °F/°C	D-92	590/310	580/304	585/307	585/307	580/304
Specific Gravity	D-287	0.855	0.8571	0.8586	0.8597	0.8628
Color	D-1500	1.0 max	1.0 max	1.0 max	1.0 max	1.0 max
Neutralization No.	D-974	0.3	0.3	0.3	0.3	0.3
Copper (Cu) Corrosion	D-130A	1a	1a	1a	1a	1a
ISO Viscosity Grade	-----	150	220	320	460	680
SAE Gear Oil No.	-----	80W-90	90	80W-140	140	-----
AGMA No.	-----	4 EP	5 EP	6 EP	7 EP	8 EP

Performance Characteristics

Four-Ball Wear Test Average Wear Scar Diameter (40 Kg., 1200 rpm., 1 hr. @ 75°C)	D-4172	0.34 mm	0.34 mm	0.34 mm	0.34 mm	0.34 mm
Four-Ball EP (Weld Load)	D-2783	315 kgf	315 kgf	315 kgf	315 kgf	315 kgf
Timken (OK Load)	D-2782	65 lbs.	65 lbs.	65 lbs.	65 lbs.	65 lbs.
Conradson Carbon Residue	D-189	Nil	Nil	Nil	Nil	Nil
Emulsion Characteristics @ 82°C (Oil/Water/Emulsion)	D-1401	40-40-0 (5)	40-40-0 (5)	40-40-0 (5)	40-40-0 (5)	40-40-0 (5)
Rust Test Procedure B	D-665	Pass No Corrosion	Pass No Corrosion	Pass No Corrosion	Pass No Corrosion	Pass No Corrosion
Rotating Bomb Oxidation Test (Minutes)	D-2272	> 2000	> 2000	> 2000	> 2000	> 2000

LUBRIPLATE Syn Lube HD 220 and LUBRIPLATE Syn Lube HD 460 pass the 12 Stages of the Four Square (FZG) Test

<u>Packaging Available</u>	<u>Syn Lube HD 150</u>	<u>Syn Lube HD 220</u>	<u>Syn Lube HD 320</u>	<u>Syn Lube HD 460</u>	<u>Syn Lube HD 680</u>
Carton 4/1 Gallon Jugs	L1000-057	L1001-057	L1002-057	L1003-057	L1004-057
5-Gallon Pail	L1000-060	L1001-060	L1002-060	L1003-060	L1004-060
16-Gallon Drum	L1000-061	L1001-061	L1002-061	L1003-061	L1004-061
55-Gallon Drum	L1000-062	L1001-062	L1002-062	L1003-062	L1004-062