

# SYNOLAN 1000 OILS



GENERAL  
LUBRICATION



Premium synthetic ashless multi-purpose oil

## APPLICATIONS

Antiwear oils for all types  
of moving parts

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Compressors  
Gears  
Bearings  
Circulating systems

- **SYNOLAN 1000 OILS** oils are multi-purpose, ashless synthetic circulating oils that excel in a wide range of applications including air compressors (especially viscosity grades 32 through 150), bearings, enclosed gear boxes (especially viscosity grades above ISO 150), circulating oil systems, heat transfer systems and other equipment operating in severe conditions.
- **SYNOLAN 1000 OILS** are capable of extending the lubricant service life, typically two, three, or four times over that of mineral oil based products. The ISO 32 to 68 grades are recommended for rotary screw compressors while the 100 and 150 grades are recommended for reciprocating air compressors. They may be used as R&O or AW gear oils when AGMA EP grades are not required.

## SPECIFICATIONS

None

## ADVANTAGES

Long fluid life and high  
operating reliability

- Exceptional high thermal and oxidative stability and durability.
- Excellent low-temperature fluidity for easy cold start ups
- Excellent water separation at both high and low temperatures
- Very good anti-wear protection along with a high viscosity index assures high film strength at elevated temperature.
- Non-EP lubricant offers excellent corrosion protection at high temperature
- Ashless formula with high hydrolytic stability prevents deposits and maintains excellent cleanliness
- Excellent filterability
- Useful temperature range from -20°F to 450°F.  
Compatible with conventional mineral oils and many synthetic oils (diesters, PAO, polyol esters, etc.)

TEST PROPERTIES—please see next page.

TOTAL Lubricants USA, Inc.

400 Chisholm Place, Suite 418,  
Plano, Texas 75075  
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**Synolan 1000 Oils**  
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# SYNOLAN 1000 OIL SERIES

(Page 2—test properties)



GENERAL  
LUBRICATION



TOTAL

## Premium synthetic ashless multi-purpose oil

TYPICAL CHARACTERISTICS--SYNOLAN 1000 OILS (Compressor oil grades)					
ISO viscosity grade	32	46	68	100	150
AGMA grade	-	1	2	3	4
API gravity (ASTM D 1298)	35.0	36.0	33.0	32.5	30.8
Specific gravity @ 60/60°F (ASTM D 1298)	0.848	0.845	0.860	0.863	0.872
Density, lbs/gal (ASTM D 1298)	7.08	7.04	7.15	7.19	7.26
Viscosity cSt @ 40°C (ASTM D-445)	30.0	42.3	69.5	106	150
Viscosity cSt @ 100°C (ASTM D-445)	6.0	7.3	12.4	18.0	17.5
Viscosity index (ASTM D 2270)	148	136	180	189	128
Pour point °F (°C) (ASTM D-97),	-70 (-57)	-70 (-57)	-55 (-48)	-45 (-43)	-40 (-40)
Flash point °F (°C) (ASTM D-92),	500 (260)	530 (277)	500 (260)	500 (260)	475 (246)
Copper corrosion strip rating (ASTM D-130) (3 Hours @ 212 F)	1b	1b	1b	1b	1b
Oil-water separation time, min (ASTM D-1401)	15	15	45	45	--
Four ball wear scar diameter, mm (ASTM D-2266) (1 Hour/75 C/1200 rpm/40 kg)	0.50	0.50	0.50	0.50	0.40

TYPICAL CHARACTERISTICS--SYNOLAN 1000 OILS (Gear oil grades)					
ISO viscosity grade	220	320	460	680	1000
AGMA grade	5	6	7	8	8A
API gravity (ASTM D 1298)	30.2	29.6	29.2	28.4	27.5
Specific gravity @ 60/60°F (ASTM D 1298)	0.875	0.878	0.875	0.885	0.890
Density, lbs/gal (ASTM D 1298)	7.29	7.31	7.34	7.368	7.41
Viscosity cSt @ 40°C (ASTM D-445)	234	320	480	654	937
Viscosity cSt @ 100°C (ASTM D-445)	23.7	29.1	38.4	55.3	68
Viscosity index (ASTM D 2270)	127	124	124	146	144
Pour point °F (°C) (ASTM D-97),	-35 (-37)	-30 (-34)	-20 (-29)	-30 (-34)	-20 (-29)
Flash point °F (°C) (ASTM D-92),	475 (246)	470 (243)	465 (241)	520 (271)	520 (271)
Copper corrosion strip rating (ASTM D-130) (3 Hours @ 212 F)	1B	1B	1B	1B	1B
Oil-water separation time, min (ASTM D-1401)	30	30	30	30	-
Four ball wear scar diameter, mm (ASTM D-2266) (1 Hour/75 C/1200 rpm/40 kg)	0.40	0.40	0.40	0.40	0.40

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TOTAL Lubricants USA with a policy of continuous improvement, reserves the right to change specifications as our technology progresses.  
We are not responsible for the misuse and/or misapplication of our products. MSDS are found at on our web site.