PRODUCT DATA SHEET

SYNTHETIC GEAR OIL

Synthetic Gear Oil, an enclosed gear lubricant, is a totally synthetic hydrocarbon and ester combination, Extreme Pressure lubricant offering outstanding Extreme Pressure and anti-wear properties, as well as excellent viscosity-temperature properties, and extremely low coefficients of friction and traction. **Synthetic Gear Oil** is compatible with mineral oils.

Applications

- Dragline, shovel and heavy process gear cases
- Planetary transmissions
- Electric wheel motors
- Compliances: U.S. Steel 224, AGMA 9005-E02, DIN 51517 Part 3

ISO Viscosity Grade	150	220	320	460	680	1000
Bosch Rexroth	X	X	X	X		
Caterpillar (Bucyrus)		X	X	X		X
General Electric					X	
LeTourneau				X		
Liebherr			X		X	
Siemens (Flender)	X	X	X	X	X	X

Features and Benefits

♦ PAO and ester based	State-of-the-art low traction base fluids promote friction and temperature control and reduced wear for extended component life.
♦ Controls micropitting	Prevents low cycle tooth surface damage (micropitting or gray staining) that can lead to catastrophic gear damage.
♦ Highly filterable	Clean fluid promotes longer component and fluid life for reduced cost of ownership.
♦ Extreme Pressure and anti-wear properties	Reduces wear to maximize component useful life helping to reduce replacement parts costs and lost production time.

General Description

Synthetic Gear Oil is a full synthetic Extreme Pressure gear lubricant. **Synthetic Gear Oil** utilizes proprietary ester and synthetic hydrocarbon technology for improved protection of gears and bearings. **Synthetic Gear Oil** reduces wear and controls micropitting.

Product No. 66880, 66900, 66920, 66940, 66960, 66980

Bel-Ray Company, LLC • P.O. Box 526 • Farmingdale, NJ 07727 USA
TEL +1 732-938-2421 • FAX +1 732-938-4232 • www.belray.com

SYNTHETIC GEAR OIL

TYPICAL PROPERTIES

Product No.	***66880***	***66900***	***66920***	***66940***	***66960***	***66980***
ISO Viscosity Grade	150	220	320	460	680	1000
SAE Grade	110	140	190	250	250	250
Formerly AGMA Number	4	5	6	7	8	8A
Viscosity, ASTM D445						
@ 40ºC, cSt	153	236	307	459	683	923
@ 100ºC, cSt	20.9	28.9	35.6	47.6	65.0	96.0
Viscosity Index, ASTM D2270	160	161	163	162	167	196
Pour Point, ASTM D97						
ºC	-51	-48	-46	-48	-42	-37
(ºF)	-60	-54	-51	-54	-44	-35
Copper Strip Corrosion, ASTM D130						
3 hrs @ 121ºC, rating	1b	1b	1b	1b	1b	1b
Rust Test, ASTM D665						
Procedure A & B	Pass	Pass	Pass	Pass	Pass	Pass
4-Ball Wear Test, ASTM D4172						
@ 1200 rpm, 40 kg, 1 hr, 75ºC						
Scar diameter, mm	0.31	0.30	0.31	0.33	0.31	0.32
Timken EP Test, ASTM D2782						
OK Load, kg	45.4	45.4	45.4	45.4	45.4	45.4
(lb)	(100)	(100)	(100)	(100)	(100)	(100)
FZG Micropitting Test, FVA 54						
Fail Stage	--	10	10	10	10	--
Endurance Test, GFT-Class	--	High	High	High	High	--
FZG Scuffing Load Test, DIN 51534						
A/16.6/90 and A/8.3/90						
Fail Stage	12	12	12	12	12	12
Color	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow

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