

SYN GEAR

Full Synthetic Gear Oil



Features

SYN GEAR oils meet or exceed the following industry standards:

- US Steel 222 and 224
- AGMA 250.04 and 9005-D94
- DIN 51517, part 3
- David Brown S1.53 101
- Cincinnati-Milacron P-35, P-59, P-63, P-74, P-76, P-77, P-78
- FZG Load Stage 12 Pass

Benefits

- Long life . less waste oil generated
- Compatible with mineral gear oils (except **SYN GEAR PG** oils)
- Excellent stability
- Wide choice of grades available
- Top level performance

SYN GEAR oils are industrial extreme pressure (EP) gear oils made with synthetic bases and top performance additives. Their chief advantage over mineral oils is their exceptional resistance to thermal and oxidative degradation, which gives a significantly longer oil life where contamination can be avoided. In addition, since synthetic oils have a degree of natural multi-grading

SYN GEAR oils offer a wider operating temperature range than the equivalent grades of mineral-based gear oils. This can be important in applications where low temperature start-up may be needed, or where there is a wide variation in ambient temperatures.

SYN GEAR oils have highly effective EP additives to prevent the welding and transfer of metal between the contact surfaces of heavily-loaded gear teeth. This reduces the possibility of damage to the gear surfaces even when shock loading is present.

SYN GEAR oils are non-corrosive to gearbox and bearing materials, and will prevent the rusting of ferrous (iron-containing) metals. They also separate readily from water, allowing it to settle to the bottom of the gearbox where it can be drained away. Water mixed with the oil would reduce its lubricating ability and act as a promoter of oxidation and other degenerative processes.

SYN GEAR PG uses a Poly Glycol synthetic base. These oils have very low coefficient of friction and are ideal for reducing frictional wear damage where rubbing contact occurs, as in worm gear sets. The PG oils are non-corrosive to gearbox and bearing materials that contain copper and its alloys, such as brass and bronze.

SYN GEAR and **SYN GEAR PG** are not recommended where constant operating temperatures exceed 100°C. In the appropriate grades, these oils are recommended for all types of gear sets except automotive differentials: In those applications, we recommend **SYN HDH**.

Typical performance results

ISO GRADE	150	220	460 PG	1000
AGMA GRADE	4 EP	5 EP	7 EP	8A EP
VISCOSITY (D-445)				
cSt @ 40°C	150	220	390	1003
cSt @ 100°C	20.2	27.5	56.0	84.1
VISCOSITY INDEX (D-2270)	159	161	220	165
POUR POINT (°C) (D-97)	-40	-38	-29	N/D
FLASH POINT (°C) (D-92)	248	249	183	284
TIMKEN LOAD (Kg) (D-2782)	36.2	36.2	16	36.2
4-BALL WEAR SCAR DIAM. (mm) (D-2266)	0.3	0.3	0.36	0.3
1Hr., 40 Kg, 1200RPM, @ 75°C				
4-BALL EP (D-2783)				
LD. WEAR INDEX (Kg)	51	51	N/D	51
FZG LOAD STAGE	12	12	12	12
FOAM PREVENTION (D-892)				
SEQ. I (75°F)	0/0	0/0	0/0	0/0
SEQ. II (200°F)	0/0	0/0	0/0	0/0
SEQ. III (75°F)	0/0	0/0	0/0	0/0
DEMULSIBILITY (D-2711)				
WATER IN OIL %	0.5	0.5	N/D	0.5
TOTAL FREE WATER (mL)	82.0	82.0	N/D	82.0
EMULSION (mL)	0	0	N/D	0
RUST PREVENTION (D-665)				
WITH DISTILLED WATER	PASS	PASS	PASS	PASS

Available sizes & part numbers

	3.78L (1 US gal)	18.9 L Pail (5.0 US gal)	205L Drum (54.2 US gal)	205L Metal Drum (54.2 US gal)	1000L Cube (264 US gal)	Bulk
Syn Gear 150		F0085740	F0071950			
Syn Gear 220		F0085840		F0019650		
Syn Gear 460 PG		F0079140	F0035050			
Syn Gear 1000			F0037350			

Check with sales representative or website for the latest product approvals.



Lubricants

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