



# SYNPRO EP OILS

## (Synthetic Industrial EP Gear Oil)

**SYNPRO EP OILS** are superior quality synthetic lubricants with exceptional high stability and durability for gearing operation under severe conditions. They provide outstanding extreme pressure (EP) properties and excellent load carrying capacity, oxidative and thermal stability, superior resistance to sludge, varnish, lacquer and carbon deposit formation, excellent water separation properties, high lubricity and film strength, a broad operating temperature range and increased useful oil life.

**SYNPRO EP OILS** are synthetic extreme pressure, high viscosity index industrial gear lubricants blended from premium quality synthetic base stocks and further enhanced with the latest additive technology. They effectively reduce sludge and varnish deposits and perform at lower operating temperatures than mineral oil EP gear lubes and have a low coefficient of friction.

**SYNPRO EP OILS** are formulated to give performance exceeding AGMA 250.04 and US Steel 224 requirements for enclosed gear drives. They are recommended for applications where an AGMA EP gear lubricant is required. Synpro EP Oils have excellent lubricity and decreases sliding and rolling friction of steel worm gears resulting in decreased power consumption.

**SYNPRO EP OILS** can be used at temperatures from -20°F and up. These products provide excellent corrosion resistance to bronze, copper and steel metallurgy and they exhibit superior antifoam properties. Their exceptional low temperature fluidity provides applications not normally possible with mineral oil products of comparable viscosity grades.

The superior low temperature properties and inherent high viscosity index enable these products to perform satisfactorily in year-round services. They reduce wear at cold startup, and maintain viscosity and high film strength at high temperatures. This means that equipment gets superior wear protection at both high and low temperatures, and potential energy savings.

**SYNPRO EP OILS** are capable of extending the lubricant service life over that of mineral oil based

products and Synpro EP gives longer gear component life than mineral oil counterparts, resulting in an overall improvement of productivity, increased efficiency, reduced maintenance cost and downtime.

**SYNPRO EP OILS** are compatible with conventional seals, paints and coatings. They are readily miscible with mineral oil, synthetic ester or vegetable oil based fluids.

### APPLICATIONS:

**SYNPRO EP OILS** are recommended for a wide range of heavily loaded industrial gears and bearings and other applications that are subject to severe service conditions or temperature extremes. They excel in a wide range of gear applications including spur, helical, herringbone, bevel and most types of industrial hypoid gearing. They are also suitable for other bearing surfaces where loads are heavy, particularly where high peak or shock loads are encountered. This would include plain journal, ball, roller and other types of rolling element bearings and other equipment operating in severe conditions.

Typical applications are for industrial gear sets with heavy tooth loads, high peak loads, intermittent shock load and extreme temperatures. Gear drives and pinion stands of metal rolling mills, ball mills, cement mills, paper mills, mining equipment and heavy construction and excavation equipment.

**SYNPRO EP OILS are not** intended for use in "yellow metal" worm gear applications. The OEMs oppose the use of EP lubricants containing sulfur/phosphorus in combination with bronze metallurgy. The oils as a class is not formulated for heavily loaded hypoid gearings and synthetic automotive gear lube (Synpro Gear Oils) should be recommended for these applications.



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### TYPICAL CHARACTERISTICS

Product Code	44150	44220	44320	44460	44680	44680
ISO Viscosity Grade	150	220	320	460	680	1000
AGMA Grade	4 EP	5 EP	6 EP	7 EP	8 EP	8A EP
API Gravity	31.6	30.8	29.9	29.0	28.4	27.5
Specific Gravity (D1298)	0.868	0.872	0.877	0.881	0.885	0.890
Density, lb/gal	7.22	7.26	7.30	7.34	7.37	7.41
Viscosity (ASTM D-445):						
cSt @ 40°C	142	213	307	437	630	950
cSt @ 100°C	17	23	29	37	50	66
Viscosity Index (D-2270)	133	134	134	134	134	135
Timken OK load, lbs	65	65	65	65	65	65
4-Ball EP						
Weld Load	315	315	315	315	315	315
Load wear index	50	53	50	57	53	55
Pour Point (D-97),						
°F	-43	-37	-34	-32	-26	-26
(°C)	-45	-35	-30	-25	-15	-15
Fire Point (D-92),						
°F	460	460	460	460	460	460
(°C)	238	238	238	238	238	238
Copper Corrosion (D-130)						
3 Hours @ 212 F	1b	1b	1b	1b	1b	1b

The above data is subject to usual manufacturing variation. For more information and availability, call 1-800-442-LUBE.  
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