



SYNERGY

HIGH PERFORMANCE GEAR OIL

BEYOND SYNTHETIC®

Synergy is an ultra-tough, long life, EP industrial gear oil proven to make gears run smoother, quieter, cooler and longer without overhauls. Synergy gains its performance advantage over competing mineral and synthetic oils through its superior blend of synthetic base oils plus Synslide additive technology, Royal Purple's unique, proprietary, noncorrosive, EP technology.

Synergy protects gears in severe service applications where other EP oils fail. Synergy is recommended for users looking for longer oil life and significantly improved gear box reliability and performance.

For more information, please request Royal Purple's "Gear Lubrication Manual."

SYNSLIDE® ADDITIVE TECHNOLOGY MAKES THE DIFFERENCE!

Synthetic oils enable Royal Purple to make superior lubricants, but it is Royal Purple's advanced Synslide additive technology that gives Royal Purple's EP lubricants their amazing performance advantages. Synslide additive technology truly is beyond synthetic.

Synslide additive technology, Royal Purple's tough, EP lubricating film, provides maximum protection under boundary lubrication conditions typically caused by heavily loaded, slow speed and / or shock load conditions. This tenacious, slippery film significantly improves lubrication and reduces wear by increasing the oil film thickness and toughness, which helps to prevent metal-to-metal contact in gears and bearings.

Synslide additive technology is noncorrosive to gears and bearings, including case-hardened gears that are easily pitted by conventional sulfur-phosphorus EP oils. Synslide additive technology displaces water from metal surfaces and excels in protecting equipment in wet environments. It also fortifies the oil against the detrimental effects of heat, which causes oil to oxidize.

PERFORMANCE ADVANTAGES

High Film Strength

Synergy protects gears and bearings beyond the ability of conventional EP gear oils.

Shock Load Protection

Synergy protects against fatigue failure in gears subjected to sudden shock loads.

Rapidly Separates from Water

Synergy rapidly and completely separates from water, which is easily drained from the bottom of the oil reservoir.

Longer Oil Life

Synergy has outstanding oxidation stability that greatly extends oil change intervals while keeping gear boxes clean.

Reduces Bearing Vibrations

The tough oil film of Synergy coupled with its ability to micro-polish contacting bearing elements provides superior bearing lubrication.

Saves Energy

The tough oil film of Synergy and low coefficient of friction save energy in gear boxes operating under load.

Synthetic Solvency

The natural solvency of Synergy cleans up dirty gear boxes and keeps them clean.

Compatible with Seals

Synergy has excellent compatibility with most seals.



Compatible with Other Oils

Synergy is compatible with most elastomers and can be mixed with other mineral oils and most synthetic oils. (It is not compatible with silicone or glycol-based synthetics.)

Environmentally Responsible

Synergy components are TSCA listed and meet EPA, RCRA and OSHA requirements. Synergy extends oil drain intervals, eliminates premature oil changes, decreases the amount of oil purchased and disposed of and conserves energy.

		ISO GRADE					
Typical Properties*	Method	100	150	220	320	460	680
SAE Grade	---	80W85	80W90	90	85W140	140	250
AGMA Grade	---	3 EP	4 EP	5 EP	6 EP	7 EP	8 EP
Viscosity	D-445						
cSt @ 40°C		100	150	220	320	460	680
cSt @ 100°C		11.7	15.7	21.4	26.1	33.5	47.5
Viscosity Index	D-2270	105	105	113	103	105	115
Flash Point, °F/°C	D-92	460/238	405/207	400/204	435/224	415/213	440/227
Pour Point, °F/°C	D-6892	-33/-36	-30/-34	-33/-36	-30/-34	-24/-31	-24/-31
Copper Corrosion Test	D-130						
3 Hrs @ 100°C		1A	1A	1A	1A	1A	1A
Rust Test	D-665						
Fresh Water		PASS	PASS	PASS	PASS	PASS	PASS
Salt Water		PASS	PASS	PASS	PASS	PASS	PASS
Foam Test, Seq II	D-892	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0	0/0/0
Demulsibility Test	D-1401						
Mins @ 180°F		43/36/1(10)	40/39/1(10)	42/37/1(10)	40/40/0(10)	42/37/1(10)	43/36/1(10)
Cincinnati Millicron "B"	D-2070						
Corrosion / Oxidation		PASS	PASS	PASS	PASS	PASS	PASS
Four Ball EP Test	D-2783						
Load Wear Index		56	56	56	56	56	56
Weld Load, kgf		315	315	315	315	315	315
Density, lbs/g	D-4052	7.4	7.41	7.38	7.48	7.49	7.46

*Properties are typical and may vary.