THERMAX™ 680 GREASE

Special Purpose EP Grease

Beyond Synthetic™

Beyond Synthetic™

Thermax™ 680 Grease is a special purpose, ultra-tough, multi-synthetic, aluminum complex EP grease. It is designed to lubricate equipment requiring grease formulated with a high viscosity base oil.

Thermax™ 680 Grease is formulated with advanced synthetic base oils plus Royal Purple's proprietary, extreme pressure (EP) Synslide® additive technology, which forms a chemical film capable of carrying loads much greater than other EP oils and greases under boundary conditions. Thermax™ 680 Grease also has good oxidation stability, greatly resists water washout and provides good rust and corrosion protection to both ferrous and nonferrous metals. Thermax™ 680 Grease excels in bearings or sliding surfaces that operate at low speeds, under heavy loads or shock loads, at high temperatures or in wet environments. Typical applications can be found in steel mills, paper mills or in marine service.

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.

Typical Properties*

Viscosity	
cSt @ 40˚C	680
NLGI Grade	2
Thickener Type (soap base)	Aluminum Complex
Thickener Content	9 to 10 percent
Fluid Type	Multi-Synthetic
Specific Gravity	0.90
Penetration @ 77˚F	
Cone Unworked, mm x 10-1	293
60 Strokes, mm x 10-1	285
10,000 Strokes, mm x 10-1	267
Worked Stability,	
100,000 strokes. % change	<10
Flash Point ˚F(˚C)	>450(232)
Drop Point ˚F(˚C)	522(272)
Timken OK Load, lbs.	100
Copper Corrosion	1A
Oxidation Resistance	
PSI Drop, 100 hours	<5

*All properties are typical and may vary.

Royal Purple, Ltd. • 1 Royal Purple Lane • Porter, Texas 77365
Phone: 281-354-8600 • Fax: 281-354-7600 • www.royalpurple.com