



# **SYNERGY<sup>®</sup> WORM GEAR OIL**

## **HIGH PERFORMANCE / SEVERE SERVICE GEAR OILS**

### **BEYOND SYNTHETIC™**

Royal Purple offers two premium worm gear oils: para-synthetic Synergy Worm Gear Oil and fully synthetic Thermyl-Glyde Worm Gear Oil. These oils contain slippery synthetic molecules plus special anti-wear additives to provide the lubricity and oiliness properties necessary to excel in worm gear lubrication. Both oils utilize a dense, high molecular weight, synthetic cushioning additive that protects against fatigue failure from sudden shock loads. Royal Purple's worm gear oils are noncorrosive to both ferrous and nonferrous metals. (Note: Worm gear manufacturers state that Sulfur-Phosphorous EP gear oils can cause rapid deterioration of bronze worm gears and should not be used). Their excellent oxidation stability and water separating properties extend oil drain intervals and prevent the formation of sludge that frequently occurs in wet gear boxes.

Thermyl-Glyde fully synthetic worm gear oil is recommended where heavy loads, shock loads, low operating speeds and / or high operating temperatures are encountered. Synergy Worm Gear Oil and fully synthetic Thermyl-Glyde Worm Gear Oil are Textron / Cone drive approved.

### **DYNAGLYDE<sup>®</sup> ADDITIVE TECHNOLOGY MAKES THE DIFFERENCE!**

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

DynaGlyde additive technology forms a tough EP lubricating film that is noncorrosive to both ferrous and nonferrous worm gears. It provides maximum protection for heavily loaded, sliding surfaces typically encountered in worm gear service. It provides extra protection for worm gears operating at slow speeds and under shock load conditions as well. DynaGlyde 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**

- **Excellent Wear Protection**  
Para-synthetic Synergy Worm Gear Oil and fully synthetic Thermyl-Glyde Worm Gear Oil contain synthetic oils and additives that provide superior protection to equipment.
- **Lower Coefficient of Friction**  
Synergy and Thermyl-Glyde worm gear oils save energy and reduce operating temperatures.
- **Longer Oil Life**  
Synergy and Thermyl-Glyde worm gear oils keep gear boxes clean and extend oil drain intervals.
- **Cushioning Molecules**  
Synergy and Thermyl-Glyde worm gear oils reduce fatigue failures in bearings and gears.
- **Prevents Corrosion**  
Synergy and Thermyl-Glyde worm gear oils protect both ferrous and nonferrous metals during operation and shutdown.



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SYNERGY WORM GEAR OIL		ISO GRADES		
TYPICAL PROPERTIES*	ASTM METHOD	460	680	1000
AGMA Grade	---	7	8	8A
Viscosity	D-445			
cSt @ 40°C		460	680	1000
cSt @ 100°C		36.5	47.6	60.2
Viscosity Index	D-2270	120	120	117
Flash Point, °F	D-92	400	405	390
Copper Corrosion Test	D-130			
3 Hrs @ 100°C		1A	1A	1A
Demulsibility Test	D-1401			
Mins @ 180°F		5	5	5
Density, lbs/g	D-4052	7.46	7.45	7.45
Synthetic Fatty Oil	---	YES	YES	YES

\*Properties are typical and may vary

THERMYL-GLYDE WORM GEAR OIL		ISO GRADES	
TYPICAL PROPERTIES*	ASTM METHOD	460	680
AGMA Grade	---	7	8
Viscosity	D-445		
cSt @ 40°C		460	680
cSt @ 100°C		36.5	47.6
Viscosity Index	D-2270	120	120
Flash Point, °F	D-92	400	405
Copper Corrosion Test	D-130		
3 Hrs @ 100°C		1A	1A
Demulsibility Test	D-1401		
Mins @ 180°F		5	5
Density, lbs/g	D-4052	7.34	7.38
Synthetic Fatty Oil	---	YES	YES

\*Properties are typical and may vary