Synergy® Worm Gear Oil
Thermyl-Glyde® Worm Gear Oil

High Performance / Severe Service Gear Oils

Beyond Synthetic™

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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.

Dynaglyde® 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 non-corrosive 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.
- **Long 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 Grade		
Typical Properties*	460	680	1000
AGMA Grade	7	8	8A
Viscosity			
cSt @ 40˚C	460	680	1000
cSt @ 100˚C	33.0	42.5	58.5
SSU @100˚F	2452	3650	5379
SSU @ 210˚F	161	207	284
Viscosity Index	105	104	113
Flash ˚F	455	455	455
Pounds/Gallon	7.49	7.52	7.52
Demulsibility, 40/40/0	Pass	Pass	Pass
Corrosion Test			
Copper	Pass	Pass	Pass
Bronze	Pass	Pass	Pass
Rust Test			
Fresh Water	Pass	Pass	Pass
Salt Water	Pass	Pass	Pass
Synthetic Fatty Oil	Yes	Yes	Yes

*Properties are typical and may vary.

Thermyl-Glyde® Worm Gear Oil

	ISO Grade		
Typical Properties*	460	680	1000
AGMA Grade	7	8	8A
Viscosity			
cSt @ 40˚C	460	680	1000
cSt @ 100˚C	34.5	45.3	64.2
SSU @100˚F	2444	3634	5345
SSU @ 210˚F	168	220	311
Viscosity Index	112	113	126
Flash ˚F	410	410	415
Fire ˚F	495	495	495
Pounds/Gallon	7.39	7.42	7.26
Demulsibility, 40/40/0	Pass	Pass	Pass
Corrosion Test			
Copper	Pass	Pass	Pass
Bronze	Pass	Pass	Pass
Rust Test			
Fresh Water	Pass	Pass	Pass
Salt Water	Pass	Pass	Pass
Synthetic Fatty Oil	Yes	Yes	Yes

*Properties are typical and may vary.

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