WHITMORE'S

TECHNICAL DATA SHEET

PARAGONTM GOLD HIGH PERFORMANCE GEAR OIL

Paragon™ Gold is a "eutectic" type gear oil formulated for use in all gearboxes, but especially where excessive wear and short component life drive up operating costs.

Inadequately lubricated gears and bearings can experience scuffing under high load. Scuffing occurs when the tips of opposing asperities momentarily weld. The anti-wear additive system used in Paragon™ Gold stops scuffing by forming a protective chemical layer in the area of contact. The surfaces continue to experience high load, but rather than micro welding, they are made smoother by the pressure.

The eutectic smoothing effect of Paragon™ Gold will also partially flatten pre-existing wear damage, usually within a few hundred hours of operation. Condemned equipment can stay in service indefinitely, or until a scheduled shutdown.

Pitting is also stopped by the use of Paragon™ Gold. Pitting is caused by metal fatigue and metal fatigue is minimized when the load is carried by a smoother surface. Some "initial pitting" may still occur when Paragon™ Gold is used, especially where there is misalignment.

All viscosity grades of Paragon $^{\text{TM}}$ Gold meet the requirements of DIN 51517-3.

BENEFITS:

- WEAR PROTECTION stops wear under a wide variety of operating conditions, including the most severe load.
- SMOOTHING OF SURFACES smoothes contact surfaces of bearings and gears under load.
- LONG COMPONENT LIFE lab testing has revealed extremely low wear and friction levels using Paragon™ Gold. Field-testing has verified outstanding wear protection.
- LONG OIL LIFE Highly resistant to oxidation, a major cause of reduced lubricant life.
- RUST PROTECTION leaves a film on gears that remains in place during long shutdown periods. This coating prevents rust and ensures a lubricating film at startup.
- CLEAN light colored oil with low-sludge additive system ensures components remain clean and free of deposits for years of operation.

APPLICATIONS:

Use Paragon $^{\text{TM}}$ Gold where conventional gear oils fail, where long component life is essential, or where long intervals between oil changes are unavoidable.

Suitable applications can be found in almost any industry.

ASTM #		TYPICAL CHARACTERISTICS						
	ISO Grade	100	150	220	320	680	1000	1500
D-445	Kinematic Viscosity							
	cSt @ 40°C	104	146	215	320	671	1,000	1,539
	cSt @ 100°C	12.50	15.20	19.82	28.00	50.00	61.50	83.10
D-2161	Saybolt Viscosity							
	SUS @ 100°F	543	765	1,132	1,715	3,556	5,360	8,302
	SUS @ 210°F	70	80.6	100	136	242	298	403
D-2270	Viscosity Index	113	105	106	120	120	120	123
D-97	Pour Point, °F (°C)	-15 (-26)	-10 (-23)	-10 (-23)	8 (-13)	15 (-9)	10 (-12)	10 (-12)
Gardner	Density , lb/gal @ 60°F (15.5°C)	7.30	7.30	7.30	7.51	7.41	7.53	7.57
Method	Specific Gravity, g/cc @ 60°F (15.5°C)	0.876	0.876	0.876	0.902	0.884	0.902	0.909
D-92	Flash Point, °F (°C)	390 (199)	390 (199)	400 (204)	400 (204)	400 (204)	470 (243)	470 (243)
	Cleveland Open Cup							
D-2782	Timken OK Load, lb	65	65	65	70	70	70	70
D-4172	Four Ball Wear							
	Scar Width, mm @ 40 kgf	0.40	0.40	0.40	0.40	0.40	0.40	0.40
D-665	Rust Test, Distilled Water	Pass	Pass	Pass	Pass	Pass	Pass	Pass
D-2893	Oxidation for Lubricating Oils,							
	% Viscosity Change	<6	<6	<6	<6	<6	<6	<6
D-130	Copper Strip Corrosion	1B	1B	1B	1B	1B	1B	1B
	FZG Test, Stages Passed	>12	>12	>12	>12	>12	>12	>12

The above are average values. Minor variations which do not affect product performance are to be expected in normal manufacturing.

Laboratory tests do not fully reflect the in-service performance abilities of Paragon™ Gold

PACKAGING Drums

THE WHITMORE MANUFACTURING COMPANY

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