



TECHNICAL DATA SHEET

CLARET™ ENCLOSED GEAR OIL

Whitmore's Claret™ enclosed gear oils have been formulated to meet the unique demands of heavily loaded, industrial gearing systems. Claret™ contains molybdenum disulfide, a colloidal lubricant which provides extreme pressure protection under severe load and shock load.

Anti-wear and extreme pressure protection are assured with Claret™, even under boundary lubrication conditions. Claret™ is suitable for use in both steel-on-steel and steel-on-bronze applications such as worm gears. It may also be used to replace compounded oils in many applications.

Claret™ oils feature long-lasting, anti-foaming protection which aids in reducing wear, lowering operating temperatures and protecting seals. The blend of carefully selected base stocks provides excellent oxidation stability and extended service life of the lubricant.

All viscosity grades of Claret™ meet the requirements of DIN 51517-3.

BENEFITS:

- **SOLID LUBRICANTS** - contains molybdenum disulfide for extreme pressure protection under severe load and shock load.
- **ANTI-WEAR** - protects even under severe conditions to extend gear life.
- **ANTI-FOAM** - extends oil life, reduces wear, protects seals and lowers temperatures.
- **VERSATILE** - suitable for all enclosed gear systems which require an EP oil, even worm gearing.
- **OXIDATION RESISTANT** - provides longer service intervals with fewer changeouts.

APPLICATIONS:

Claret™ was specifically formulated for enclosed gear driven pulverizers and other severe gearing applications found in mining equipment, power plants, steel mills, cement plants and other industries. Meets U.S. Steel 224 and AGMA 9005-D94 specifications.

ASTM #		TYPICAL CHARACTERISTICS						
	ISO Grade	68	150	220	320	460	680	1500
	SAE Grade	80	90	90	90	140	140	N/A
	AGMA Grade	2 EP	4 EP	5 EP	6 EP	7 EP	8 EP	9 EP
D-445	Kinematic Viscosity							
	cSt @ 40°C	70	159	235	345	475	736	1,630
	cSt @ 100°C	9	15	22	27	31	37	65
D-2161	Saybolt Viscosity							
	SUS @ 100°F	943	749	1,295	1,783	2,512	3,980	8,831
	SUS @ 210°F	56	79	110	131	157	179	315
D-2270	Viscosity Index	99	91	111	101	96	82	91
D-97	Pour Point, °F (°C)	-20 (-29)	-10 (-23)	0 (-18)	5 (-15)	5 (-15)	15 (-9)	25 (-4)
	Cleveland Open Cup							
Gardner Method	Density,							
	lb/gal @ 60°F (15.5°C)	7.40	7.46	7.50	7.52	7.55	7.80	7.84
	Specific Gravity,							
	g/cc @ 60°F (15.5°C)	0.888	0.896	0.900	0.905	0.905	0.939	0.941
D-92	Flash Point, °F (°C)	400 (204)	400 (204)	400 (204)	400 (204)	400 (204)	400 (204)	425 (218)
	Cleveland Open Cup							
D-2782	Timken OK Load, lb	60	65	65	65	70	70	70
D-2783	Four Ball EP, Weld Point, kg	400	400	500	500	500	500	500
D-4172	Four Ball Wear							
	Scar Width, mm @ 40 kgf	0.60	0.60	0.50	0.50	0.50	0.50	0.50
D-2893	Oxidation for Lubricating Oils,							
	% Viscosity Change	<6	<6	<6	<6	<6	<6	<5
	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.

PACKAGING

Drums	Kegs	Pails
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THE WHITMORE MANUFACTURING COMPANY

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