



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						
D-445	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-2161	Kinematic Viscosity							
	cSt @ 40°C	70	159	235	345	475	736	1,630
D-2270	cSt @ 100°C	9	15	22	27	31	37	65
	Saybolt Viscosity							
	SUS @ 100°F	943	749	1,295	1,783	2,512	3,980	8,831
D-97	SUS @ 210°F	56	79	110	131	157	179	315
	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
D-92	Specific Gravity,							
	g/cc @ 60°F (15.5°C)	0.888	0.896	0.900	0.905	0.905	0.939	0.941
D-2782	Flash Point, °F (°C)	400 (204)	400 (204)	400 (204)	400 (204)	400 (204)	400 (204)	425 (218)
	Cleveland Open Cup							
D-2783	Timken OK Load, lb	60	65	65	65	70	70	70
D-4172	Four Ball EP, Weld Point, kg	400	400	500	500	500	500	500
	Four Ball Wear							
D-2893	Scar Width, mm @ 40 kgf	0.60	0.60	0.50	0.50	0.50	0.50	0.50
	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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Performance Under Pressure Since 1893

LIMITED WARRANTY: The Whitmore Manufacturing Company makes the Limited Express Warranty that at the date of delivery, its goods shall be free from defects in Whitmore's materials and workmanship and shall meet the express written statements of quality, if any, made by Whitmore in connection with the sale of the goods. Other than such Limited Express Warranty, there are no express warranties made with respect to the sale of goods and all implied warranties existing under the law are expressly disclaimed and negated, particularly, Whitmore NEGATES AND DISCLAIMS THE IMPLIED WARRANTY OF MERCHANTABILITY AND THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. All other liability, either in contract or tort, including without limitation, strict liability found in Section 402A of the Restatement of Torts or otherwise, is negated and disclaimed. The sole remedy for Whitmore's breach of such Limited Express Warranty shall be a refund of the purchase price of its goods, and Whitmore shall have no responsibility for incidental or consequential damages sustained as a result of the use of the goods, whether sustained to the goods themselves or to other property. Data listed are subject to usual manufacturing variations.