



TECHNICAL DATA SHEET

CALIBER™ M EXTREME PRESSURE GREASE with MoS₂

Whitmore's Caliber™ M is a series of extreme pressure lithium complex greases that contain molybdenum. The series is designed primarily for use in draglines, shovels, drills, earthmoving equipment and other heavy-duty rolling stock applications.

Caliber™ M has the extreme pressure capability to prevent wear in heavily loaded bushings and bearings.

Caliber™ 3M contains 3% solid lubricants and 5M contains 5%.

The Sub-Zero grade (NLGI 0) contains a blend of wax-free hydrotreated mineral oil and synthetic PAO fluid. This grade is designed for maximum pumpability in cold conditions, without becoming excessively sloppy during warm periods.

BENEFITS:

- WATER-RESISTANT - excellent resistance to washing out of bearings.
- EXTREME PRESSURE - protects against shock loads and scuffing of metal surfaces. Reduces parts replacement and downtime.
- SEALS OUT DIRT AND CONTAMINANTS - forms a protective barrier to reduce wear and extend lubricant life.
- VERSATILE FORMULATION - ideal for a wide range of equipment, including process machinery and industrial applications.

APPLICATIONS:

Whitmore's Caliber™ M is designed to lubricate the components of mining machines, earthmoving equipment and rolling stock. It is recommended for wheel bearings, slewing bearings, vehicle chassis points and U-joints, as well as pivot points and bucket pins on earthmoving equipment.

ASTM #		TYPICAL CHARACTERISTICS				
		Caliber™ 3M & 5M				
	Grade	EP 00	Sub-Zero	EP 0	EP 1	EP 2
D-217	Cone Penetration (Worked)	400-430	355-385	355-385	310-340	265-295
D-2265	Dropping Point, °F (°C)	450 (232)	450 (232)	450 (232)	472 (244)	507 (264)
D-445	Kinematic Viscosity (Base Oil + Polymer) cSt @ 40°C cSt @ 100°C	130 13	65 9.5	130 13	220 19	300 21
Gardner Method	Density, lb/gal @ 60°F (15.5°C)	7.59	7.59	7.59	7.59	7.53
D-2509	Timken OK Load, lb	65	65	65	65	65
D-2596	Four Ball EP Weld Point, kg (Minimum)	400	400	400	500	620
D-2266	Four Ball Wear, Scar Width, mm	0.46	0.50	0.46	0.46	0.46
D-1264	Water Washout, % Loss	Not Tested	Not Tested	Not Tested	Not Tested	<3.5
D-1743	Rust Test	1,1,1 (Pass)	1,1,1 (Pass)	1,1,1 (Pass)	1,1,1 (Pass)	1,1,1 (Pass)
D-4048 (Modified)	Copper Strip Corrosion for Greases 212°F (100°C) @ 3 hrs	1B	1B	1B	1B	2B
OEM Standard	Low Temperature Pumpability Lincoln Ventmeter @ 400 psi, °F (°C)	Not Tested	-35 (-37)	-20 (-30)	8 (-13)	23 (-5)
	Ambient temperature range, °F °C	--	-40 to 60 -40 to 16	-20 to 70 -30 to 20	-5 to 320 -21 to 160	10 to 355 -12 to 180

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

PACKAGING

Shuttle Tanks	Nonreturnable Totes	Drums	Pails
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THE WHITMORE MANUFACTURING COMPANY

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