

TECHNICAL DATA SHEET

MATRIX® M HIGH DUTY GREASE with MOLY

Whitmore® Matrix® M is a calcium sulfonate complex grease with molybdenum disulfide that is highly recommended for difficult applications such as extreme pressure, water, heat, or chemical attack.

The thickener system itself has a protective effect, but the addition of moly creates a powerful layer of protection under conditions of extreme load and slow speed.

Matrix M helps neutralize acids and also resists reacting with caustic materials. Matrix grease has prevented corrosion despite years of exposure to phosphoric acid fumes.

A continuous temperature of 400°F (200°C) is within its safe range. It can withstand 550°F (288°C) continuously, provided the bearing is replenished every 30 minutes with normal quantities of grease. Occasional temperature spikes to 600°F (315°C) can be sustained for 5 to 10-minute periods without melting or carbonizing.

Matrix M EP 2 meets the Bucyrus International specification for multi-purpose grease (SD 4711). Grades 1 and 2 meet standards KP0R -20, KP1R-20 and KP2R-10 per DIN 51502.

BENEFITS:

- LONG LIFE reduced relubrication frequency.
- WATER RESISTANT seals out water, even in underwater applications.
- WEAR PROTECTION recommended for slow to medium speed bearings and bushings. Especially useful for very high load applications.

APPLICATIONS:

<u>Water / Chemicals</u>: Phosphate processing, suction and wet end rolls on paper machines, outdoor cranes and ship lifts, boat trailer wheel bearings and other marine applications.

<u>Highly Loaded Equipment:</u> Pellet mills, shaker screens, belt conveyor pulleys, slewing bearings, pin and bushing, centrifuges, hammer mills, bearings of cone crushers, sealed work roll bearings, fan bearings and many others.

<u>High Temperature Applications:</u> Oven conveyor bearings, plastic extruder bearings, rotary unions on roto-molders.

<u>Automotive and Earthmoving Applications:</u> Wheel bearings, U-joints, ball joints, pin-and-busing pivot points and slewing bearings.

ASTM#		TYPICAL CHARACTERISTICS		
	Grade	EP 1	EP 2	
D-217	Penetration Range	310-340	265-295	
D-2265	Dropping Point, °F (°C)	500 (260)	500 (260)	
D-445	Kinematic Viscosity (Base Oil w/Polymer) cSt @ 40°C cSt @ 100°C	500 31	500 31	
D-445	Kinematic Viscosity (Base Oil) cSt @ 40°C cSt @ 100°C	130 12	130 12	
Gardner Method	Density , lb/gl @ 60°F (15.5°C)	8.35	8.40	
D-2596	Four Ball EP Weld Point, kg	800	800	
D-2266	Four Ball Wear, Scar Width, mm	0.44	0.40	
D-1264	Water Washout, % Loss	2	2	
D-1743	Rust Test	Pass	Pass	
OEM Standard	Lincoln Ventmeter @ 400 psi, °F (°C)	12 (-11)	34 (1)	

PACKAGING

Non-Returnable	Drums	Kegs	Pails	Cartridges
Plastic Tote				50 Per Case

For warranty information, scan the QR code.

whitmores.com

Made in the USA in an ISO 9001-2015 and ISO 14001:2015 Facility.

