



TECHNICAL DATA SHEET

COMPASS™ EP HEAVY DUTY LUBRICATING GREASE

The primary features of this heavy-duty grease are tolerance for water and the ability to withstand heavy loads.

Compass™ EP is a lithium-calcium grease, fortified with synthetic polymers that cause the grease to cling to metal and repel water, even at high pressure.

When water does eventually get mixed into the body of the grease, the impact is less than with conventional grease. Compass™ EP contains additives that counteract the negative impact of water ingress. During standardized laboratory testing, water was mixed for 5,000 strokes; the degree of softening was then measured. There was no measurable effect on the consistency of the grease. Under this test, many greases become soft to the point of flowing.

The ability of Compass™ EP to withstand extreme pressure is evidenced by the high weld point (400 kilograms) on the Four Ball machine. End users consistently report that Compass™ EP performs under load as well as greases that cost substantially more.

Despite its robust nature, Compass™ EP is very pumpable. The NLGI 1 grade can be pumped through a Lincoln system at sub-zero temperatures.

BENEFITS:

- RESISTS WATER – keeps a protective film on metal.
- STABLE – retains its body under high load or when water enters.
- WEAR PROTECTION – contains molybdenum disulfide for protection under high load.
- PUMPABLE – can be used in automatic systems at low temperatures.

APPLICATIONS:

Recommended for slow and medium speed industrial bearings, especially those that are exposed to high load and/or water. Use in steel mills and other primary metal processing, pulp and paper operations, waste water treatment facilities, cement mills, rubber and plastics, marine applications, mining, logging, construction, etc.

ASTM #		TYPICAL CHARACTERISTICS
D-217	Grade	EP 2
D-2265	Cone Penetration (Worked)	265-295
D-445	Dropping Point, °F (°C)	380 (193)
	Kinematic Viscosity (Base Oil w/Polymer)	
	cSt @ 40°C	4,542.0
	cSt @ 100°C	239.5
Gardner Method	Density, lb/gal @ 60°F (15.5°C)	8.29
D-2596	Specific Gravity, g/cc @ 60°F (15.5°C)	0.995
	Four Ball EP	
	Weld Point, kg	800
D-2266	Four Ball Wear	
	Scar Width, mm	0.60
D-4049	Water Spray-Off, % Loss	20
	40 psi @ 100°F (38°C) @ 5 min.	
D-1264	Water Washout, % Loss	<5
	Water Ingress Test,	
	% Change after 10% Water is Churned into the grease	<2
D-1743	Rust Test	Pass
D-4048 (Modified)	Copper Strip Corrosion for Greases	1B
OEM	212°F (100°C) @ 3 hrs	
Standard	Low Temperature Pumpability	
	Lincoln Ventmeter @ 400 psi, °F (°C)	5 (-15)
	Thickener Type	Lithium – Calcium
	Color	Dark Gray

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	Kegs	Pails
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Performance Under Pressure Since 1893

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