

ENVIROLUBE® XE EXTREME TCLP-SAFE NON-ASPHALTIC OPEN GEAR LUBRICANT

For many years Whitmore's Envirolube® XE has been a proven, robust open gear lubricant used primarily on Ball Mills and Kilns. It is free of heavy metals and asphalt. Instead of asphalt, it contains a blend of high viscosity petroleum distillate, synthetic polymer and resins. The advantage over asphalt is that the spent lubricant does not harden over time. This greatly simplifies cleanup.

Whitmore now introduces a new generation of open gear lubricant, Envirolube® XE Extreme. This unique product contains an additive combination that further reduces friction and wear and promotes smoothing of contact surfaces. Here's how it works.

Scuffing wear occurs when the tips of opposing asperities momentarily weld. Envirolube® XE Extreme creates an effective layer of chemical and physical protection that prevents micro-welding and scuffing. With this protective cushion in place, the high load on the gears causes the asperities to be pushed down, thus smoothing them with minimal removal of metal.

Ideally, Envirolube® Extreme should be sprayed intermittently onto the gears. This allows the product to partially dry on the gears, resulting in a more robust high-viscosity protective film. For large, heavily loaded Ball Mill gears a lubrication frequency of 15 to 20 minutes is normal.

BENEFITS:

- WEAR PROTECTION, SURFACE SMOOTHING - extends gear life and reduces operating expenses. The need for special running-in compounds is eliminated.
- GEAR INSPECTION – The brown coating is visible on the gear, but is transparent enough to allow for gear inspection using a strobe light.
- EASY CLEANUP - The non-asphaltic base remains soft. It flows readily from the gear guard and is easily removed.
- TCLP-Safe – passes the EPA Toxicity Characteristic Leaching Procedure. The spent product is not considered a "characteristic hazardous waste".

APPLICATIONS:

Use on heavily loaded open gears such as Ball Mills and Kilns. Both grades meet the specifications of Falk and Metso Minerals. They also meet requirements of FL Smidth when used in intermittent spray systems (not idler immersion systems). Suitable for use in automatic lubrication systems using either drip tubes or spray nozzles, and also in airless spray systems.

ASTM #	Grade name	TYPICAL CHARACTERISTICS	
		Medium	Heavy
D-445	Kinematic Viscosity , (base fluid) cSt @ 40°C cSt @ 100°C	>100,000 1,100	>100,000 1,100
D-445	Kinematic Viscosity (completed product) cSt @ 40°C	1,080	3,500 – 4,500
Gardner Method	Density , lb/gal @ 60°F (15.5°C) Specific Gravity , g/cc @ 60°F (15.5°C)	7.53 0.904	7.46 0.896
D-93	Flash Point , Pensky Martens, °F (°C)	245 (118)	245 (118)
D-92	Flash Point , Cleveland Open Cup, °F (°C)	345 (174)	345 (174)
D-2783	Four Ball EP Weld Point, kg	800	800
D-4172	Four Ball Wear (standard settings) Scar Width, mm	0.51	0.45
D-4048 Modified	Copper Strip Corrosion 212° (100°C) @ 3 hr	1B	1B
	Low Temperature Pumpability Lincoln Ventmeter @ 400 psi, °F (°C)	5 (-15)	20 (-7)
	FZG Test Total specific mass loss after stage 12 , mg/kWh	--	0.067 mg/kWh

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

PACKAGING

Shuttle Tanks	Drums	Kegs	Pails
---------------	-------	------	-------

For warranty information, scan the QR code.



930 Whitmore Drive • Rockwall, Texas 75087 • USA • (972) 771-1000 • 800-699-6318
An ISO 9001 and ISO 14001 registered company • www.whitmores.com