

PRODUCT INFORMATION

ECOSE[®] EXTREME INDUSTRIAL EP GEAR OILS

ECOSE[®] Extreme Industrial EP Gear Oils are high quality, extreme-pressure (EP) industrial gear oils, designed to deliver superior performance in enclosed gear drives that often operate under heavy or shock load conditions. These AGMA EP gear oils are fortified with advanced technology chemistry that provides a high level of resistance to micropitting and gear tooth surface fatigue often found in heavily loaded gearboxes with surface hardened gear tooth surfaces.

FEATURES AND BENEFITS:

ECOSE[®] Extreme Industrial EP Gear Oils are formulated with highly refined base oils and a unique additive system that provides for outstanding rust and corrosion protection of all metal surfaces and advanced water separation properties. These lubricants provide outstanding protection in industrial gear sets operating under severe conditions such as intermittent shock loads, high peak loads, and heavy tooth loads. Additionally, they offer the following benefits:

- Excellent load carrying ability
- Outstanding water separation characteristics
- High resistance to micropitting and metal surface fatigue
- Protection from galling, scuffing and welding of gear teeth
- Non-corrosive to bronze, brass, copper and other copper alloy parts

APPLICATIONS:

ECOSE[®] Industrial EP Gear Oils are categorized by the American Gear Manufacturers Association (AGMA) for use in a wide variety of industrial gear sets. They are ideal for enclosed industrial gear sets where extreme pressure is critical for component protection. Typical gear applications include spur, bevel, helical, worm, and industrial hypoid gear cases. Typical bearing applications include plain, ball, roller, and sleeve bearings. They are recommended for the lubrication of slides, ways, sprockets, chain drives, winches, hoists, and machine tools. Additionally, these industrial gear oils meet the following performance requirements (for the appropriate viscosity grades):

- AGMA 250.04, 251.02
- AGMA 9005-E02 EP
- DIN 51517, Part 3
- US Steel 224
- David Brown S1.53.101
- Cincinnati Machine
- ISO 12925-1 Type CKD

AVAILABILITY:

ECOSE[®] Extreme Industrial EP Gear Oils are available throughout Nu-Tier Brand's marketing area. Your Nu-Tier representative can provide specific information. Need additional information? Call Nu-Tier Brands @ 1-877-771-LUBE (5823) or visit Nu-tierbrands.com.

Typical Properties

ISO Viscosity Grade	Test Method	150	220	320	460
AGMA Grade		4EP	5EP	6EP	7EP
Product Code		543150	543220	543320	543460
Viscosity, cSt @ 40°C	ASTM D-445	150	220	320	460
Viscosity, cSt @ 100°C	ASTM D-445	14.2	19.5	24.6	31.0
Viscosity Index	ASTM D-2270	95	97	97	108
Flash Point, COC, °F	ASTM D-92	430	445	480	490
Foam Test	ASTM D-892	Pass	Pass	Pass	Pass
FZG Scuffing Test, stages	ASTM D-5182	12	12	12	12
Timken OK Load, lbs	ASTM D-2782	65	65	70	75
Four Ball EP Weld, kg	ASTM D-2783	250	250	250	250
Four-Ball Wear Test, mm	ASTM D-4172	0.28	0.23	0.21	0.20
API Gravity, 60°F	ASTM D-1298A	27.1	26.6	26.4	25.1
Density, lbs/gal (g/L)	Calculated	7.37 (883)	7.40 (887)	7.44 (891)	7.45 (893)