

PRODUCT INFORMATION

ECOSE[®] SYNTHETIC EP GEAR OIL

Synthetic Extreme Pressure (EP) Gear Oil

ECOSE[®] Synthetic EP Gear Oils are synthetic extreme pressure (EP) gear oils designed to provide extra protection and very long service life in highly loaded gear boxes that may be operated over very wide temperature range.

FEATURES AND BENEFITS:

ECOSE[®] Synthetic EP Gear Oil series is designed to protect heavily loaded gears and bearings in extreme pressure service that includes sustained high temperatures. Based on PAO synthetic technology, these lubricants enable lower fluid friction in the gear tooth high load zones to improve efficiency. They also enable much longer drain interval service than conventional industrial gear oils and usually eliminate the need for seasonal changes due to their very good low temperature flow characteristics. Other benefits include:

- Excellent EP protection
- Excellent oxidation resistance and thermal stability
- Excellent rust and corrosion protection
- Excellent lubrication flow characteristics over very wide temperature ranges.
- Extremely low pour points
- Very good water separation, foam resistance and air release properties

APPLICATIONS:

ECOSE[®] Synthetic EP Gear Oils are recommended for heavily loaded industrial gear boxes where excellent lubrication is required over a wide range of operating temperatures and extended drain intervals are essential. Applications include the following requirements in the appropriate viscosity:

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|-----------------------|--------------------------------------|
| • DIN 51517-3 | • Cincinnati Machine (Gear C Series) |
| • US Steel 224 | • AGMA 9005-E02 EP |
| • ISO 12925-1 CKC/CKD | • GM LS-2 |

AVAILABILITY:

ECOSE[®] Synthetic 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 @ 1-877-771-LUBE (5823) or visit Nu-tierbrands.com.

ECOSE® Synthetic EP Gear Oils

Typical Properties

ISO Viscosity Grade		68	100	150	220
Product Code	Test Method	543901	543902	543903	543904
AGMA Number		2EP	3EP	4EP	5EP
Viscosity, cSt @ 40°C	ASTM D-445	67	100	145	220
Viscosity, cSt @ 100°C	ASTM D-445	11.6	14.0	19.0	25.5
Viscosity Index	ASTM D-2270	169	142	149	147
Flash Point, COC, °F (°C)	ASTM D-92	473(245)	473(245)	482(250)	482(250)
Pour Point, °F (°C)	ASTM D-97	-44(-42)	-40(-40)	-40(-40)	-40(-40)
Timken OK Load, lb.	ASTM D-2782	70	65	65	75
4-Ball EP Weld, kg	ASTM D-2783	250	250	315	315
4-Ball Wear, mm	ASTM D-2266	0.4	0.4	0.4	0.4
FZG Gear Test, Stages	FZG	12+	12+	12+	12+
Rust Test	ASTM D-665A	Pass	Pass	Pass	Pass
Copper Strip Corrosion	ASTM D-130	1a	1a	1a	1a

ISO Viscosity Grade		320	460	680	1000
Product Code	Test Method	543905	543906	543907	543908
AGMA Number		6EP	7EP	8EP	8EP
Viscosity, cSt @ 40°C	ASTM D-445	340	440	670	1000
Viscosity, cSt @ 100°C	ASTM D-445	35.0	43.0	60.5	73
Viscosity Index	ASTM D-2270	147	150	158	144
Flash Point, COC, °F (°C)	ASTM D-92	482(250)	482(250)	482(250)	482(250)
Pour Point, °F (°C)	ASTM D-97	-40(-40)	-35(-37)	-30(-34)	0 (-18)
Timken OK Load, lb.	ASTM D-2782	75	75	75	75
4-Ball EP Weld, kg	ASTM D-2783	315	315	315	315
4-Ball Wear, mm	ASTM D-2266	0.4	0.35	0.35	0.35
FZG Gear Test, Stages	FZG	12+	12+	12+	12+
Rust Test	ASTM D-665A	Pass	Pass	Pass	Pass
Copper Strip Corrosion	ASTM D-130	1a	1a	1a	1b