

Cargill Priolube™ EF 3446

Next-generation synthetic ester base oil for electric vehicles



Low
viscosity



For EV
transmission
fluids



Create high
efficiency
lubricants



Oxidatively
stable



High bio-based
carbon content*

Priolube™ EF 3446 is a low viscosity, fully synthetic dielectric base oil suitable for formulating EV transmission and e-axle fluids.



cargill.com/priolube-ef

Features and benefits

- Excellent traction reduction - increases efficiency in e-axles and transmissions
- Excellent load handling capabilities – improves FZG on SRV (DIN 51834-4) performance in Group III base oils
- Oxidatively stable – improves fluid lifetime
- Very low viscosity – reduces churning losses
- No halogenated materials intentionally added

*ASTM D6866

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Cargill™

Typical Properties

Property ¹	Units	Value
Kinematic viscosity at 40°C	cSt	6.1
Kinematic viscosity at 100°C	cSt	2.0
Kinematic viscosity at -20°C	cSt	80.4
Acid value	mg KOH/g	< 0.1
Oxidative stability (ASTM D8206)	minutes	327
Breakdown voltage (EN 60156 / IEC 60156)	kV	86
Dielectric dissipation factor (tan delta)	–	0.024
Electrical conductivity (DIN 51 111)	pS m ⁻¹	208
Flash point COC	°C	204
Pour point	°C	< -40
Density at 20°C	g cm ⁻³	0.92
Foam (ASTM D6082)	–	No foam
Biodegradability (OECD 301B)	–	Readily biodegradable
Halogen content	–	None*
Renewable carbon content (ASTM D6866)	%	87.2
Autoignition temperature	°C	222
Heat capacity (specific) at 20°C (ASTM D7896-19)	kJ/kg K	1.98
NOACK volatility at 200°C	%	9.6
Viscosity index	–	135
Thermal conductivity at 20°C (ASTM D7896-19)	W m ⁻¹ K ⁻¹	0.148
Thermal conductivity at 40°C (ASTM D7896-19)	W m ⁻¹ K ⁻¹	0.145

¹ Typical values. Please refer to CoA for actual results

* No halogenated materials intentionally added

Applications and recommended uses

Priolube™ EF 3346 is compatible with Group III, IV and V (ester) base oils and we recommend a maximum treat rate of 20% w/w. Contact us for specific guidance.

Handling

For optimum shelf life, drum/ commercial quantities of Priolube EF 3446 are supplied under a nitrogen blanket. We recommend Priolube EF 3446 is stored under a nitrogen blanket once the container has been opened.

Environment and safety

Please request our safety data sheet.

Further information

If you have further questions do not hesitate to reach out to your local representative.

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Non-warranty

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