

PRODUCT INFORMATION

# ECOSE<sup>®</sup> HORIZON XHD

## ADVANCED HEAVY DUTY DIESEL ENGINE OIL

**ECOSE<sup>®</sup> Horizon XHD Diesel Engine Oil** provides advanced engine protection with “*next-generation*” additive technology designed to meet modern on-highway low emission diesel engines. **ECOSE<sup>®</sup> Horizon XHD** meets or exceeds the newest **API CK-4** engine oil specification and provides outstanding wear protection necessary to satisfy the performance requirements of most North American on-highway diesel trucks. **ECOSE<sup>®</sup> Horizon XHD Engine Oils** will replace today’s lubricants and will be backwards compatible with previous HD diesel engine oils.

**PERFORMANCE FEATURES:**

- Shear Stable Formulation** – maintains critical film thickness over extended use promoting extended drains
- Hydro-Treated Base Oil** – high purity, high VI base oils provide excellent on-highway and off-highway performance
- Next-Generation Technology** – improved fuel economy, engine wear protection, enhanced oxidation stability
- Advanced Aeration Control** - passes new Caterpillar engine oil foam testing-proven to reduce air bubbles for improved performance in severe duty off-road equipment and hydraulic valve-train actuation.

**APPLICATIONS:**

**ECOSE<sup>®</sup> Horizon XHD** can be used with complete confidence in most naturally aspirated or turbo-charged diesel engines as well as exhaust gas recirculated (EGR) engines. It provides superior performance for agricultural equipment, construction equipment, and stationary engines. It may also be used for manual transmissions and hydraulic systems where motor oil is recommended.

**OEM approvals:**

- Ford WSS-M2C171-F1
- Detroit Diesel 93K222
- Mack EOS-4.5 / Volvo VDS 4.5
- Product meets Cummins<sup>®</sup> Eng. Std. CES20086

**Recommended for equipment requiring:**

- API Service Categories: CK-4, CJ-4, CI-4 PLUS, CI-4
- Caterpillar ECF-3, ECF-2
- Volvo VDS-4, VDS-3
- Mack EO-O, EO-M
- Diesel engines manufactured by OEMs not listed above, where the OEM specifies API CK-4 or CJ-4 engine oil
- Detroit Diesel (4 Stroke) 93K218
- MTU Category 2.1 / Renault RLD-4, RLD-3
- International (Navistar) diesel engines
- ACEA E9, E7 / MB 228.31



**Typical Properties**

SAE Grade		10W-30	15W-40
Product Code	<b>Test Method</b>	531310	531307
API Service		CK-4	CK-4
API Gravity @ 60°F	ASTM D4052	32.1	31.3
Viscosity, cSt @ 40°C	ASTM D445	81.5	114.0
Viscosity, cSt @ 100°C	ASTM D445	12.0	15.6
Viscosity Index	ASTM D2270	142	145
CCS Viscosity, cP, @ Temp.	ASTM D5293	5,850 @ -25°C	4,850 @ -20°C
Pour Point, °F	ASTM D5949	-33	-28
Flash Point, COC, °F (°C)	ASTM D92	435(224)	440 (226)
TBN	ASTM D2896	10	10
Sulfated Ash, mass %	ASTM D-874	1.0	1.0

**AVAILABILITY:**

**ECOSE<sup>®</sup> Horizon XHD Diesel Engine Oil** is available throughout Nu-Tier Brands’ marketing area. Your Nu-Tier representative can provide specific information. Call Nu-Tier Brands @ 1-877-771-LUBE (5823) or visit Nu-tierbrands.com.