

ECOSE[™] HORIZON HD MONO-GRADE ENGINE OILS

ECOSE™ Horizon HD Mono-Grade Engine Oils are formulated with high quality base oils and with advanced additive technology that provides very good performance and protection in high output heavyduty diesel engines where a single viscosity grade is specified. They are fortified with latest technology detergents, dispersants, antiwear, and anti-corrosion additives to provide protection against engine sludge, varnish formation, scuffing and wear, and high temperature oil thickening.

FEATURES AND BENEFITS:

- Very good wear protection of valve train components and bearings
- Oxidation resistance to protect against excessive viscosity increase
- Equipment operating in severe and off-road environments, mining, construction, agriculture
- Manual transmissions and hydraulic systems where Allison C3, C4 and/or CAT TO-2 performance is required.
- Resists foaming

PERFORMANCE APPROVALS AND CAPABILITIES:

- API CF/SL (SAE 10W)
- API CF, CF-2/SL (SAE 30, 40, 50)
- Allison C3/C4
- Caterpillar TO-2

ECOSE[™] Horizon HD Mono-Grade Engine Oils are available in three viscosity grades and contain the same quality base oils and high performance additives used in most of today's multi-viscosity diesel engine oils. Specific viscosity grades are used in power-shift, manual, and hydrostatic transmissions, final drives, and hydraulic systems where the equipment manufacturer designates the use of heavy-duty, detergent-type engine oils. Always consult Owners' Manuals for specific viscosity grade and API Service Category recommendations.

AVAILABILITY:

ECOSE™ Horizon HD Mono-Grade Engine Oils are available throughout Nu-Tier Brands' marketing area. Your Nu-Tier representative or can provide specific information. Need additional information? Call **Nu-Tier Brands** @ 1-877-771-LUBE (5823) or visit Nu-tierbrands.com.

SAE Grade		10W	30	40	50
API Service		CF/SL	CF, CF-2, SL	CF, CF-2, SL	CF, CF-2, SL
Product Code	Test Method	531301	531303	531304	531315
Gravity, API	ASTM D-4052	30.5	28.6	27.9	26.8
Density, lbs/gal (g/L)	Calculated	7.27	7.36	7.39	7.45
Viscosity, cSt @ 40°C	ASTM D-445	42.2	98.2	138.5	189.0
Viscosity, cSt @ 100°C	ASTM D-445	7.0	11.8	14.7	17.5
CCS, cP @ (n°C)	ASTM D-5293	5,000 (-25) max	N/A	N/A	N/A
Viscosity Index	ASTM D-2270	125	110	106	100
Pour Point, °F	ASTM D-5949	-32.8	-15	-10	+10
Flash Point, °F	ASTM D-92	420	450	450	480
TBN	ASTM D-974	10.1	10.1	10.1	8.5
Sulfated Ash, Mass %	ASTM D-874	1.0	1.2	1.2	1.0

Typical Properties