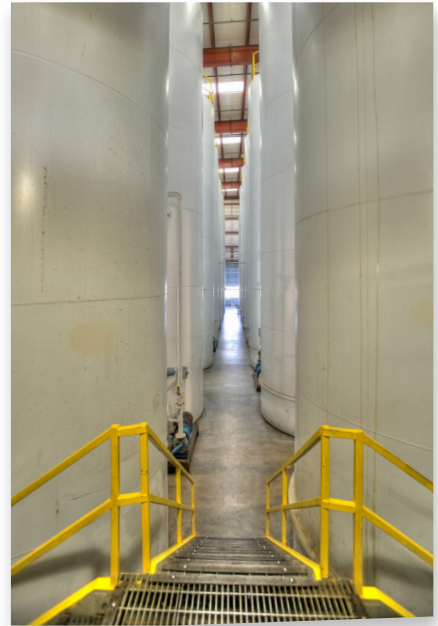




HEAVY DUTY ENGINE OILS CI-4

Sinclair Premium Heavy Duty CI-4 Engine Oils are specially engineered for heavy duty diesel and gasoline engines operating under all service conditions. Contains high viscosity index lubricating oils and a unique blend of detergents, dispersants, antioxidants, and friction modifiers to provide outstanding performance and protection.



APPLICATIONS

- Where API CI-4/SL, CH-4, CG-4, CF-4, CF-2, CF oils are recommended.
- For 2004 and older automotive gasoline engines
- Recommended for use in Caterpillar, Cummins, Detroit Diesel, Mack, Navistar, Volvo and many imported diesel engines.
- Also suitable for use in hydraulic systems requiring fluids with anti-wear, anti-foam, anti-rust, and anti-oxidant properties
- The outstanding frictional properties of this oil provides improved fuel economy.

PERFORMANCE

- Extended service intervals.
- Outstanding oil consumption control.
- Superior performance over a wide range of fuel sulfur content.
- Excellent soot handling capability.
- Superior deposit control.
- Excellent wear protection.
- Superb oxidation stability.

SPECIFICATIONS/APPROVALS

- API CI-4/SL, CH-4, CG-4, CF-4, CF-2, CF
- MACK EO-N, EO-M, EO-M Plus
- Caterpillar ECF-2, ECF-1-a
- Cummins CES 20078, 20076, 20071
- CID A-A-52306, MIL-PRF-2104G
- Detroit Diesel Series 50/6013, Power Guard 93K215, N214
- Deutz
- Ford M2C171D
- MAN 3275, 270
- MB p228.3
- Navistar International MTU Type I & II (Meets Engine Tests)
- Global DHD-1
- JASO DH-1
- ACEA E7, E2, E3
- Allison C-4



HEAVY DUTY ENGINE OILS

CI-4

TYPICAL PHYSICAL PROPERTIES

Viscosity Grade	METHOD	TYPICAL RESULTS	
		HD SAE 15W-40 CI-4	HD SAE 10W-30 CI-4
Gravity, °API	ASTM D287	29.75	29.13
Specific Gravity @ 60°F (15.6°C)	ASTM D4052	0.8775	0.8809
Viscosity @ 40°C cSt	ASTM D445	115.8	70.58
Viscosity @ 100°C cSt	ASTM D445	15.23	10.98
Viscosity Index	ASTM D2270	137	146
Color	ASTM D1500	2.5	2.5
Zinc, wt. %	ASTM D5185	0.14	0.14
Phosphorus, wt. %	ASTM D5185	0.128	0.128
Calcium, wt. %	ASTM D5185	0.135	0.135
Sulfur, wt. %	ASTM D4951	0.323	0.323
Magnesium, wt. %	ASTM D5185	0.128	0.128
Sulfated Ash, wt. %	ASTM D874	1.44	1.44
Nitrogen, wt. %	ASTM D4629	0.085	0.085
Pumping Viscosity at (°C), cP	ASTM D4684	22,100 (-25)	24,900 (-30)

Description	Pack Size	Part #	Each UPC	Case UPC	Case Dimensions	Case Cube / Pallet Cube	Case Weight / Pallet Weight	Pallet Stack
HD SAE 15W-40 CI-4	Bulk	521-001	N/A	N/A	N/A	N/A	N/A	N/A
HD SAE 10W-30 CI-4	Bulk	510-001	N/A	N/A	N/A	N/A	N/A	N/A

