CITGO CITGARD® HD ENGINE OIL

Date 12/17

DESCRIPTION: CITGO CITGARD HD Engine Oil is a heavy duty engine oil designed for both older and newer diesel engines equipped with low emission technology. CITGARD HD Engine Oil is recommended for equipment owners operating within normal duty cycles and maintaining engine manufacturer recommended oil change intervals. This product meets the API CK-4 and earlier API Categories.

QUALITIES:

- Clean engine Detergent Additive System
- Soot Control Protection
- Wear reduction additive technology
- Protects against viscosity breakdown
- Corrosive Wear Protection

APPLICATIONS:

Caterpillar ECF-3
Mack EOS-4.5 (Pending)
Volvo VDS-4.5 (Pending)
Cummins CES 20086 (Pending)
Detroit Diesel DFS 93K222 (Pending)
API Service—API CK-4, CJ-4, CI-4 Plus, CI-4, CH-4/SN

TYPICAL PROPERTIES:

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SAE Grade	**15W-40**
Material Code	622515001
Gravity, ASTM D 4052, °API	30.7
Density, lbs/gal	7.28
Flash Point, ASTM D 92 (COC), °F (°C)	442 (228)
Viscosity ASTM D 445, cSt at 40°C	117
cSt at 100°C	15.6
Viscosity Index, ASTM D 2270	142
HTHS Rate Viscosity at 150°C, ASTM D 4683, cP	4.1
CCS Viscosity at -20°C, ASTM D 5293, cP	5800
MRV Pumpability at -25°C, ASTM D 4684, cP	17000
MRV Yield Stress at -25°C, ASTM D 4684	<35
Pour Point, ASTM D 97, °F (°C)	-33 (-36)
Color, ASTM D 1500	L4.5
Sulfated Ash, ASTM D 874, m%	1.0

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