C I T G O C I T G A R D ® 7 0 0 P L U S E N G I N E O I L S A E 1 5 W - 4 0

Date 03/07

DESCRIPTION:

CITGARD 700 PLUS 15W-40 is a state-of-the-art synthetic blend engine oil created specifically to protect 2007 and older model low-emissions engines equipped with exhaust after-treatment systems and other new design features. This product exceeds the API CJ-4 heavy duty requirements as well as existing API CI-4 PLUS and earlier categories.

PERFORMANCE BENEFITS:

- Formulated specifically for engines using Ultra Low Sulfur Diesel (ULSD)
- Provides advantages for 2007 and pre-2007 heavy duty equipment
- Advanced soot control utilizing SootArrest™, soot dispersant chemistry
- Superior oxidation and thermal protection for operating at extreme temperatures
- Reduced engine wear
- Prolongs the life of diesel particulate filters (DPF's)
- Meets manufacturers' latest warranty requirements

RECOMMENDED FOR:

Equipment requiring API CJ-4, CI-4 PLUS, CI-4, CH-4, CG-4, CF-4, CF, SM
Mack EO-O Premium Plus 07
Cummins CES 20081
Caterpillar ECF-3
Detroit Diesel 93K218
Volvo VDS-4
Mercedes 228.31

APPLICATIONS:

Intended for use in heavy-duty service in commercial trucks, agricultural equipment, construction equipment, stationary engines, and other diesel-fueled engine applications. Permits year-round use in most areas by offering improved low temperature startability with full lubrication at high operating temperatures.

TYPICAL PROPERTIES:

CITGO CITGARD 700 PLUS ENGINE OIL SAE 15W-40

SAE Grade	**15W-40**
Material Code	622715001
Gravity, ASTM D 287, °API	30.2
Density, lbs/gal	7.29
Flash Point, ASTM D 92, COC, °F (°C)	450 (232)
Viscosity, ASTM D 445, cSt at 40°C	116
cSt at 100°C	15.5
Viscosity Index, ASTM D 2270	140
HTHS Rate Viscosity at 150°C, ASTM D 4683, cP	4.3
CCS Viscosity at -20°C, ASTM D 5293, cP	6200
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)	-17 (-27)
Color, ASTM D 1500	L4.5
Sulfated Ash, ASTM D 874, m%	1.0
NOACK Voatility, ASTM D 5800, % Loss	10
Total Base Number, ASTM D 2896, mg KOH/g	10