CITGARD® ENGINE CITGO 7 0 0 OILS 1 0 W - 3 0 SAEA N D1 5 W - 4 0



Date 10/10

DESCRIPTION:

CITGO CITGARD 700 Engine Oils SAE 10W-30 and 15W-40 are synthetic blends using superior technology to protect all low-emissions engines equipped with exhaust after-treatment systems and other new design features. These products exceed the API CJ-4 heavy duty requirements as well as existing API CI-4 PLUS and earlier categories.

PERFORMANCE BENEFITS:

- · Synthetic blends formulated specifically for engines using Ultra Low Sulfur Diesel (ULSD)
- Provides advanced soot control utilizing SootArrest™, soot dispersant chemistry
- Offers advantages for post-2007 and pre-2007 heavy duty commercial trucks and other diesel-fueled applications, including off-road equipment
- · State-of-the-art wear control technology for reduced wear
- Exceptional oxidation and thermal protection for operating at extreme temperatures
- · Extends diesel particulate filter (DPF) life
- Meets manufacturers' latest warranty requirements
- · Protects against engine oil oxidation and fuel dilution, especially in fleets operating greater than 5% biodiesel fuel
- SAE 10W-30 improves fuel economy and cold cranking lubrication

RECOMMENDED FOR:

Cummins CES 20081

Equipment requiring API CJ-4, CI-4 PLUS, CI-4, CH-4, CG-4, CF, SM

Mack EO-O Premium Plus 07

Detroit Diesel 93K218 (applies only to SAE 15W-40)

Caterpillar ECF-3 Volvo VDS-4 Mercedes 228.31

APPLICATIONS:

Recommended 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 by offering improved low temperature startability with full lubrication at high operating temperatures.

TYPICAL PROPERTIES:

CITGO CITGARD® 700 ENGINE OILS SAE 10W-30 AND 15W-40

| SAE Grade | 10W-30 | 15W-40 |
|---|---------------------------|---------------------------|
| Material Code | 622713001 | 622720001 |
| Gravity, ASTM D 287, °API Density, lbs/gal Flash Point, ASTM D 92, COC, °F (°C) | 30.0 7.30 431 (222) | 29.6 7.31 450 (232) |
| Viscosity, ASTM D 445, cSt at 40°C cSt at 100°C | 81 11.8 | 123 15.6 |
| Viscosity Index, ASTM D 2270 | 139 | 134 |
| HTHS Rate Viscosity at 150°C, ASTM D 4683, cP | 3.5 | 4.3 |
| CCS Viscosity at -20°C, ASTM D 5293, cP | 6,320 | 5,950 |
| MRV Pumpability at -25°C, ASTM D 4684, cP | 15,300 | 16,500 |
| MRV Yield Stress at -25°C, ASTM D 4684 | <35 | <35 |
| Pour Point, ASTM D 97, °F (°C) | -33 (-36) | -27 (-33) |
| Color, ASTM D 1500 | L3.5 | L3.5 |
| Sulfated Ash, ASTM D 874, m% | 1.0 | 1.0 |
| Total Base Number, ASTM D 2896, mg KOH/g | 10 | 10 |