



SYNTHETIC HEAVY DUTY Premium Diesel Engine Oils

Description

Synthetic Heavy Duty Diesel Engine Oils are high quality synthetic diesel engine oils engineered for use in on- and off-road diesel engines. These oils are formulated with synthetic base stocks and premium additives to help extend equipment life and improve productivity. They are formulated for use in a wide range of applications and operating environments including transport, construction and agriculture.

Synthetic Heavy Duty Diesel Engine Oils are formulated with high TBN to effectively manage acids and enhance engine performance. These oils also employ a high dispersant/detergent additive package to minimize soot thickening.

Synthetic Heavy Duty Diesel Engine Oils are non-licensed products formulated to meet the following industry and equipment specifications:

- ✓ API CK-4, CJ-4, CI-4+, CF
- ✓ ACEA E7, E9
- ✓ MB 228.31
- ✓ Caterpillar ECF-3, ECF-2, ECF-1-a
- ✓ Cummins CES20086, CES 20081
- ✓ Detroit Diesel DFS93K222, DDC 93K218, 93K215, 93K214

Features/Benefits

- ✓ **Low Volatility limits Oil Consumption and Reduces Emissions**
- ✓ **Improved Oxidation Resistance and Cold Temperature Performance from Synthetic Base Oils**
- ✓ **High Levels of Dispersants Minimize Soot Thickening**
- ✓ **Shear Stability Enhances Viscosity Retention**
- ✓ **Seal Friendly to Prevent Leaks and Extend Seal Life**

- ✓ JASO DH-2
- ✓ Mack EO-4.5, EO-O
- ✓ MAN 3275
- ✓ MTU Type 2.1, Type I & II
- ✓ Volvo VDS-4.5, VDS-4, VDS-3
- ✓ Renault RLD-4, RLD-3

Physical, Chemical, & Performance Properties

Product Number	015	053
SAE Viscosity	5W-40	15W-40
Viscosity @ 100°C, cSt	15.3	15.4
Viscosity @ 40°C cSt	91.5	113.2
Viscosity Index	177	142
Flash Point, °C (°F) (COC)	224 (435)	240 (464)
Fire Point, °C (°F) (COC)	234 (453)	250 (482)
Pour Point, °C (°F)	-41 (-42)	-38 (-36)
NOACK (% wt loss)	9.8%	4.8%
Total Base Number (TBN)	10.0	10.0
Sulfated Ash (wt %)	1.0%	1.0%