

### FULL SYNTHETIC FLEET ENGINE OIL

### Fuel Saving Synthetic Diesel Oils On- and Off-Highway Applications



REV:

04.13.2017





## **DESCRIPTION**

SynGard™ Full Synthetic Fleet Engine Oils are formulated using state-of-the-art additive technology and premium synthetic base stocks to provide exceptional fleet engine oils for over-the-road, construction, and industrial engines. These products meet performance requirements by all major OEM engine manifacturers and provide a performance upgrade over all previous formulations.

SynGard™ Full Synthetic Fleet Engine Oils are approved for use with Ultra Low Sulphur Diesel (ULSD) and Low Sulphur Diesel (LSD) fuels and for all engines equipped with Exhaust Gas Recirculation (EGR) systems and Diesel Particulate Filters (DPF). Approved for use in Caterpillar® engines using ACERT technology.

SynGard™ Full Synthetic Fleet Engine Oils utilize advanced additive technology that provides maximum wear protection, deposit control, improved fuel economy, and excellent performance in extreme high / low temperatures.

### **BENEFITS**

- Premium synthetic components enhance full film lubrication at operating temperatures
- Premium synthetic components enhance low temperature flow properties for startup and cold weather use
- Excellent wear and oxidation control
- Exceptional engine cleanliness
- Improved fuel economy

#### **APPLICATION**

- Over-the-road fleets including fleets with latest EGR and DPF engines
- Municipal service and school district bus fleets
- Automobiles, light and medium duty trucks with diesel engines
- Stationary engines powering pumps, generators, and drilling rigs
- Construction and farm equipment such as tractors, dozers, front end loaders, excavators
- Logging equipment such as skidders, feller bunchers, harvesters, loaders

# **PERFORMANCE**

API Diesel - CK-4, CJ-4, CI-4 PLUS, CI-4, CH-4

Caterpillar - ECF-3

Cummins - 20086

ACEA - E9 - 12, E7 - 12

MAN - 3575, 3275

Detroit Diesel - DDC 93K222

Mercedes - 228.31

Renault - RLD 4

Volvo / Mack - VDS 4.5 / Mack EOS 4.5

European - EMA DHD-1

TYPICAL PROPERTIES	METHOD	0W-40	5W-40
API Gravity	D-1298	35.2	35.5
Specific Gravity @15.6°C	D-1298	0.8489	0.8471
Viscosity, cSt at 40°C	D-445	80.0	75.3
Viscosity, cSt at 100°C	D-445	13.9	13.3
Viscosity Index	D-2270	180	181
High Temp/High Shear	D-4683	3.59	3.82
Cold Crank Simulation (cP)	D-5293	5,989 @ -35°C	3,779 @ -30°C
NOACK Volatility, wt. %	D-5800	11.0	11.1
Flash Point, COC °C (°F)	D-92	226 (440)	226 (440)
Pour Point, °C (°F)	D-97	-48 (-54)	-39 (-38)
Ash, % Sulphated	D-874	1.0 max	1.0 max
TBN	D-2896	9.4	9.2
ML Reference No.		591517	587180



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#### NOTE:

The information on this Product Data Sheet is believed to be accurate and is typical of current production. Specifications are subject to change without notice.

**Health And Safety Information** See separate Safety Data Sheets available on request.

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