

## **BioGreen UltraGard Synthetic Fleet Engine Oils**

*Fuel Saving Synthetic Diesel Oil  
Farm, Fleet, Off-Road All Purpose Engine Oil  
API CJ-4, CI-4 PLUS, CI-4, CH-4, CF / SN Ratings*

### **DESCRIPTION**

**BioGreen UltraGard Synthetic Fleet Engine Oils 0W-40 and 5W-40** are formulated using state-of-the-art additive technology and premium synthetic base stocks to provide exceptional fleet engine oils for over-the-road, agricultural, logging and industrial engines. These products are approved by all major OEM engine manufacturers and provide a significant performance upgrade over all previous API categories.

**BioGreen UltraGard 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.

**BioGreen UltraGard Synthetic Fleet Engine Oils** offer significant improvements in deposit control, ability to stay in grade over long periods, resistance to high temperature oxidation and engine wear protection when compared to former API service CI-4 and CI-4 Plus oils.

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### **BENEFITS**

- ✓ Biodegradable;
- ✓ Compatible with petroleum oils - no flushing necessary;
- ✓ Readily recyclable;
- ✓ Superior performance while protecting wildlife, vegetation and the environment;
- ✓ Full synthetics manufactured with superior PAO base oils;
- ✓ Premium synthetic components enhance full film lubrication at operating temperatures;
- ✓ Premium synthetic components enhance low temperature flow properties for startup and cold weather use;
- ✓ Outstanding soot control for new EGR engines;
- ✓ Exceptional engine cleanliness;
- ✓ Outstanding anti-wear, oxidation control and friction control;
- ✓ Compatible with virtually all current diesel fuels.



**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 or gasoline 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.

**HEALTH SAFETY**

This product is not classified as hazardous under OSHA definition, simply wash with soap and water after handling. Health & Safety information is printed in the MSDS sheet available on request. This product should not be used for purposes other than its intended use. Typical properties may vary slightly due to product research & development, information may change without notification.

**PERFORMANCE RATING**

API Diesel	Approved CJ-4, CI-4 PLUS, CI-4, CH-4, CG-4, CF-4 , CF
API Gasoline	Approved SN, SM, SL, SJ, SH
ACEA	E7
Mack	EO-N Premium Plus 03, EO-O
Mercedes	228.3
Cummins	CES 20081
Detroit Diesel	93K218
Volvo	VDS 4
Allison	C-4
Caterpillar	ECF-1a, ECF-2, ECF-3
Volkswagen	50501
European	MAN 3275, EMA DHD-1, MB 228.3

TYPICAL PROPERTIES	Method	0W-40 Full Synthetic	5W-40 Full Synthetic
API Gravity	29.8	35.3	35.3
Specific Gravity @15.6°C	D 1298	0.853	0.848
Viscosity, cSt at 40°C	D 445	86.6	82.7
Viscosity, cSt at 100°C	D 445	14.7	14.2
Viscosity Index	D 2270	179	178
Cold Crank Simulation (cP)	D 5293	5042 @-35oC	5721 @-30oC
Pour Point, °C	D 97	-38	-35
Pour Point, °F	-33	-31	-31
Flash Point, °C	D 92	230	230
Flash Point, °F	417	446	446
Ash Sulphated, %	D 874	1.0 max	1.0 max
TBN	D 2896	10.0	10.1