



## ***SUPER LIFE® XLD 25000FS-NANO WS2*** **ADVANCED NANO WS2 FULL SYNTHETIC HEAVY DUTY DIESEL ENGINE OILS**

*SUPER LIFE® XLD 25000 Products* are designed for the latest 2010 EPA and GHG 17 (2017 Greenhouse Gas) – compliant diesel engines to meet the increased demands of improved fuel economy and new lower-emission diesel engines equipped with exhaust after treatment systems such as Diesel Particulate Filters (DPF) with or without Diesel Oxidation Catalysts (DOC), increased rates of Exhaust Gas Recirculation (EGR) and Selective Catalytic Reduction (SCR). They provide excellent quality in on-highway and off- highway service applications and help maximize engine durability.

*SUPER LIFE® XLD 25000FS-NANO WS2 – Advanced NANO WS2 Full Synthetic Heavy duty Diesel Engine oils* are full synthetic engine oils specially developed with Synthetic base stocks, Nano tungsten disulfide (WS2) which has an extremely low coefficient of friction (0.03 at 1200°F), a load capacity is extreme high at 100,000 psi and the most advanced additive technology to meet the stringent requirements of modern heavy duty diesel engines operating under a wide variety of service conditions: severe driving, heavy load, frequent stop- and- go service to enhance emissions systems protection, improve fuel economy and protect new generation GHG’17 model heavy duty diesel engines in which and the API CK-4 is recommended. They are also backward compatible with previous API Oil Service Categories.

They are also suitable for use in engines powered by both ultra and low sulfur diesel.

### **APPLICATIONS:**

*SUPER LIFE® XLD 25000FS-NANO WS2* are recommended for high-output, high speed, turbocharged or naturally aspirated new advanced diesel powered engines including the fuel and emissions full electronic control systems in trucks, fishing & marine industries, heavy duty construction equipment, mining equipment, oil fuel engines, farm vehicles, passenger cars, all types of generators, etc., operating under severe service, subjected to wide variations in climate conditions, in all types of on-road and off- road service. They are also recommended for gasoline engines in pick- up trucks, sport- utility vehicles, and mixed fleets.

*SUPER LIFE® XLD 25000FS-NANO WS2* meet the performance requirements of the engine manufactures in North America, Europe, Japan: Caterpillar, Cummins, Detroit Diesel, Mack, Man, Mercedes, Volvo, Komatsu, Hino, Mitsubishi, Nissan, Daihatsu, International (Navistar), Ford, Chrysler, GM, BMW, Audi, Volkswagen, Peugeot, Fiat, etc.

SAE Viscosity Grade	0W-40	5W-30	5W-40	10W-40	15W-40
API CK-4, CJ-4, CI-4 Plus/SL, CI-4/SL, CH-4	x	x	x	x	x
ACEA E6		x	x	x	x
ACEA E7	x	x	x	x	x
ACEA E9	x	x	x	x	x
CATERPILLAR ECF-3, ECF-2, TO-2	x	x	x	x	x
MACK EOS-4.5, EO-O Premium Plus	x	x	x	x	x
VOLVO VDS-4.5, VDS-4, VDS-3	x	x	x	x	x
DETROIT DIESEL 93K222/93K218	x	x	x	x	x
CUMMINS CES 20086/20081	x	x	x	x	x
RENAULT TRUCKS RLD-4, RLD-3	x	x	x	x	x
MB 228.31/228.51	x	x	x	x	x

MTU Type 2.1/3.1	x	x	x	x	x
MAN 3477/3575/3775		x	x	x	x
FORD WSS-M2C171-F1	x	x	x	x	x
JASO DH-2	x	x	x	x	x
GLOBAL DHD-1				x	x
ALLISON TES 439				x	x
SCANIA UHPD, LDF-2				x	x
NAVISTAR				x	x
IVECO 18-1804 TLS E9				x	x
JOHN DEERE TIER IV ENGINES				x	x

## BENEFITS:

- Engine durability protection. Help minimize operating cost.
- Exceptional wear protection for longer engine life.
- Full Synthetic oil helps improve fuel economy.
- Excellent shear stability maintains viscosity in severe, high temperature service, low volatility, provides wear protection and helps reduce oil consumption.
- Prevent premature DPF plugging and shortened maintenance intervals.
- Fight sludge and varnish. Minimize piston and combustion chamber deposits.
- Maintain oil film under conditions of high temperature and high stress. Protect moving parts from friction, wear and engine destroying metal-to-metal contact.
- Excellent oxidation, foam, corrosion inhibition.
- Provide faster, safe starts during extreme low temperatures and increase thermal and oxidation stability at extreme high temperatures.

## TYPICAL CHARACTERISTICS

Test	Method	Typical Results				
		0W-40	5W-30	5W-40	10W-30	15W-40
SAE Viscosity Grade	SAE J300	0W-40	5W-30	5W-40	10W-30	15W-40
API Gravity	ASTM D287	34.97	34.00	33.42	33.61	33.03
Specific gravity @ 15.6°C (60°F)	ASTM D1298	0.850	0.855	0.858	0.857	0.860
Viscosity @ 40°C cSt	ASTM D445	84.95	71.75	91.6	61.25	111.0
@ 100°C cSt		14.0	11.9	14.8	10.80	15.5
Viscosity index	ASTM D2270	174	163	170	170	148
Flash Point, °C (°F)	ASTM D92	225 (437)	235 (455)	240 (464)	235 (455)	245 (473)
Pour Point, °C (°F)	ASTM D97	-50 (-58)	-46 (-51)	-46 (-51)	-48 (-54)	-38 (-36)
Total Base Number, mgKOH/g	ASTM D2896	10	10	10	10	10
Sulfated Ash, %wt	ASTM D874	1.0	1.0	1.0	0.95	0.9
HTHS Viscosity @150°C, cP	ASTM D4683	4.0	3.7	4.1	3.4	4.5
Noack, wt%	ASTM D5800	11.0	11.8	11.8	11.6	8.2

The above characteristics are average values based on recent production. Minor variations, which do not affect product performance, are to be expected in normal manufacture.

**WARNING:**

Continuous contact with used motor oil has caused skin cancer in animal tests. Avoid prolonged contact. Thoroughly wash exposed areas with soap and water. Keep out of reach of children. Don't pollute. Conserve resources. Return used oil and container to collection centers.

Reference SDS Number 12171 database on our website at [www.amtecol.com](http://www.amtecol.com) OR scan the code for a direct link