



## ***SUPER LIFE® XLD 12000*** **PREMIUM HEAVY DUTY DIESEL ENGINE OILS**

*SUPER LIFE® XLD 12000 Products* are designed for the 2007 EPA and the latest 2010 EPA– compliant engines to meet the increased demands of 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.

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

*SUPER LIFE® XLD 12000 - Premium Heavy duty Diesel Engine oils* are formulated with premium base oils and the latest additive technology to protect modern heavy duty diesel engines.

### **APPLICATIONS:**

*SUPER LIFE® XLD 12000* are recommended for new advanced diesel powered engines 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 12000* 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	10W-30	10W-40	15W-30	15W-40	20W-50
API CJ-4/SM, CI-4 Plus/SL, CI-4/SL, CH-4	x	x	x	x	x
ACEA E7-08(2008)		x		x	
ACEA E9-12(2012)		x		x	
CATERPILLAR ECF-1-a, ECF-2, ECF-3, TO-2	x	x	x	x	
MACK EO-O Premium Plus 07	x	x	x	x	
MACK EO-N PP 03, EO-N PP, EO-M/EO-M plus		x		x	
VOLVO VDS-4, VDS-3, VDS-2	x	x	x	x	
DETROIT DIESEL DDC Power Guard 93K218	x	x	x	x	
DETROIT DIESEL 93K214/93K215				x	
CUMMINS CES 20076/20077/20078/20081	x	x	x	x	
MB 228.31			x	x	
FORD WSS-M2C171-E	x	x		x	
FORD WSS-M2C171-C / D		x		x	
MTU Type 2.1				x	
MAN 3275				x	
MAN 3575			x		
RENAULT TRUCK RLD-3	x	x	x	x	
DEUTZ DQC III-10LA		x	x	x	
JASO DH-1, DH-2	x	x		x	

Global DHD-1	x			x	
SCANIA UHPD, LDF-2				x	
NAVISTAR				x	

#### **BENEFITS:**

- Prevent premature DPF plugging and shortened maintenance intervals
- Minimize piston and combustion chamber deposits.
- Fight sludge and varnish.
- Excellent protection against engine wear due to soot.
- Fuel economy, oil economy
- 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.
- Extend engine life

#### **TYPICAL CHARACTERISTICS**

Test	Method	Typical Results				
		10W-30	10W-40	15W-30	15W-40	20W-50
SAE Viscosity Grade	SAE J300	10W-30	10W-40	15W-30	15W-40	20W-50
API Gravity	ASTM D287	30.21	29.30	28.93	28.38	26.95
Specific gravity @ 15.6°C (60°F)	ASTM D1298	0.875	0.880	0.882	0.885	0.893
Viscosity @ 40°C cSt @ 100°C cSt	ASTM D445	70.5 10.8	103 14.5	87.9 12.0	117.0 15.0	175 19.8
Viscosity index	ASTM D2270	143	145	130	132	131
Flash Point, °C (°F)	ASTM D92	223 (433.4)	223 (433.4)	223 (433.4)	224 (435)	230 (446)
Pour Point, °C (°F)	ASTM D97	-36 (-33)	-36 (-33)	-36 (-33)	-36 (-33)	-25 (-13)
Total Base Number, mgKOH/g	ASTM D2896	10	10	10	10	10
Sulfated Ash, %wt	ASTM D874	0.86	0.86	0.86	0.86	0.86
HTHS Viscosity @150°C, cP	ASTM D4683	3.55	4.20	4.00	4.24	4.30

*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 12021 database on our website at [www.amtecol.com](http://www.amtecol.com) OR scan the code for a direct link*

