



**ENVIROLUBE**

**Diesel Engine Oil**

## **HD-X 15W-40**

### **Application**

EnviroLube HD-X 15W-40 is a heavy duty diesel engine oil which exceeds the requirements of the API CH-4 specification. It is recommended for Cat, Detroit Diesel, Cummins and Mack. It is intended for any application requiring oils that meet the American Petroleum institute (API) CH-4 specification.

EnviroLube HD-X is suitable for heavy duty equipment (on or off highway), diesel 4WD and light commercials vehicles. It may be used in mixed fleets but does not meet the extended drain requirements of European manufacturers. For mixed fleets the prime recommendation is EnviroLube HD Diesel 15W-40.

### **Features**

EnviroLube HD-X 15W-40 is formulated with double refined base oils to provide superior thermal stability in high power rated applications, on or off road. The additive systems offers exceptional protection from wear, combustion deposits, bearing corrosion, oil consumption and soot related oil thickening.

### **Benefits**

- ✓ Double refined base oil technology for extended product life,
- ✓ High thermal stability for severe duty turbo-charged and conventional engines.
- ✓ Control over soot related thickening
- ✓ Protection from piston ring & liner wear and deposits
- ✓ Backwards compatible with older heavy duty engines where CF-4, CG-4 or CH-4 type oils are specified
- ✓ Manufactured in an ISO 9002 certified facility to ensure strict quality control and best practice production methods
- ✓ Double refined base oil conserve vital petroleum resources

**| Intended for heavy duty diesel engines |**

**Diesel Engine Oil****HD-X 15W-40****Safety**

Your safety is important to EnviroOil. This material is classified as non-hazardous according to Worksafe Australia. However, it is recommended that the handling instructions in the Material Safety Data Sheet be followed to avoid risk of injury or irritation from exposure.

**Specifications**

EnviroLube HD-X 15W-40 is recommended where the following performance levels are specified

- Diesel :                API CH-4 (and levels CF-4 and CG-4)  
                               ACEA E2 (and B3 for light commercial diesel)
- Petrol :                API SJ (and superseded levels SF to SJ)  
                               ACEA A2
- Manufacturers :      Mack EOM-Plus, Cummins 20076 (and 20071 /72), Mercedes Benz MB228.1,  
                               Volvo VDS-2, CAT ECF-1

Note : Like all diesel engine oils meeting CI-4 & CH-4, the phosphorous exceeds the recommended level for passenger vehicles and may reduce the life of 3-way catalytic converters.

**Typical Characteristics**

Characteristic	Method	Units	Typical Value	Benefit
Viscosity Grade	SAE		15W-40	Provides a wide range of operating viscosity for protection in all climates. Shear stable product means viscosity is maintained for life of lubricant.
Density @ 15.6C	IP160	g/cm <sup>3</sup>	0.891	
Viscosity at 100°C	ASTM D445	cSt	15	
Viscosity at 40°C	ASTM D445	cSt	113	
Viscosity Index	ASTM D2270		138	
CCS Viscosity @ -20C	ASTM D5293	cP	5,600	Cold start performance 30% better than SAE recommended level
Phosphorus, ICP or XRF	ICP	%wt	0.12	High level of anti-wear additive
Sulphated Ash	ASTM D84	%wt	1.2	Exceptional piston deposit control
Calcium	ICP	%wt	0.29	Detergency/Dispersancy for protection against acidic corrosion, soot related thickening, deposit formation and bore polishing
TBN	ASTM D2896	mgKOH/g	9	

Values provided are typical and do not constitute a specification