

**Fully Synthetic**

# Kixx HD1

**High Performance Diesel Engine Oil****API CI-4/SL, ACEA E7-12**

## DESCRIPTION

Premium performance, multigrade, heavy-duty diesel engine oil specifically designed to lubricate a wide range of diesel and gasoline engines requiring API CI-4, SL, ACEA E7 performance lubricants operating under the most severe service conditions.

## APPLICATIONS

- Mixed fleets of European, North American diesel engines (high speed, four-stroke, turbocharged or naturally aspirated)
- Mixed fleets of both diesel and gasoline engines
- Mixed fleets including both old and new equipment
- Commercial road transport, including the latest electronic controlled engines.
- It meets the major diesel engine manufacturers requirements
- Stop-and-go vehicles in high soot loading service such as buses and waste collection trucks
- Off-highway vehicles and plant

## PERFORMANCE STANDARDS

- 10W-40/15W-40: API CI-4/SL, ACEA E7-12, VDS-3, MB 228.3, MAN 3275, MTU Type 2, Mack EO-M Plus, Renault RLD-2, Cummins 20076, 77, 78, Cat ECF 2, ECF 1-a, Global DHD-1 Approved
- 10W-30/20W-50: API CI-4/SL Approved, ACEA E7-12, VDS-3, MB 228.3, MAN 3275, MTU Type 2, Mack EO-M Plus, Renault RLD-2, Cummins 20076, 77, 78, Cat ECF 2, ECF 1-a, Global DHD-1 Recommended

## CUSTOMER BENEFITS

### Minimizes fleet maintenance costs

Exceptional soot dispersion keeps fuel soot in suspension, avoiding filter plugging, cylinder head sludge, abrasive polishing wear and oil thickening.

### Minimizes fleet operating costs

Excellent deposit control on valves and piston crownlands reduces oil consumption. Exceptional oxidation stability and soot control extends oil drain capability so that equipment is in service longer generating revenue. Outstanding valve train wear protection maintains fuel economy.

### Extends engine life to overhaul

High level of anti-wear additive protects against valve train wear and scuffing of highly loaded parts operating under boundary lubrication conditions.

## KEY PROPERTIES

	Fully Synthetic	Fully Synthetic	Semi Synthetic	Semi Synthetic
SAE Grade	10W-30	10W-40	15W-40	20W-50
Density, kg/L @ 15°C	0.872	0.863	0.874	0.879
Kinematic Viscosity, mm <sup>2</sup> /s @ 40°C	72.77	101.5	108.1	187.6
Kinematic Viscosity, mm <sup>2</sup> /s @ 100°C	10.89	14.97	14.75	20.74
Viscosity Index	139	154	141	130
Pour Point °C	-45	-42	-39	-33
Flash Point °C	210	226	240	254
Base Number, mg KOH/g	9.2	10.34	9.33	9.5
Package (Liters)	5, 20, 200	1,4T,5,6,20,200	1,4T,5,6,18,20,25,200	4,18,20,200

## UNIQUE SELLING POINT

- Kixx HD1 has excellent performance for sustaining durability with EGR system.
- Kixx HD1 protects sludge formed by sulfur and fuel combustion without the need for overly shortened drain intervals.

### Cummins N14 Field Test Rocker Cover Sludge Results



Kixx HD1 15W-40  
81,000 Km Oil Drains

A : 81,000 Km  
Oil Drains

B : 48,000 Km  
Oil Drains