

## **ASTRIS SAE 15W-40 LDX**

High performance motor oil for diesel and gasoline engines in commercial and passenger cars

High-performance engine oil, specially developed in order to satisfy the requirements of the specification API CI-4, particularly for the heavy duty diesel engines provided with exhaust gas recirculation systems (EGR) for reduction of nitrogen oxides (NOx) emissions.

#### **Properties and features**

- Exhaust gas recirculation causes higher levels of soot contamination in the engine oil. If uncontrolled, the soot can form deposits and therefore damage the engine. The outstanding dispersing properties of SAE 15W-40 LDX engine oil reduces this phenomenon.
- Thanks to his excellent anti-wear properties, the use of this fluid prevents mechanical damage, which might be caused by the presence of increased amounts of soot.
- The use of exhaust gas recirculation systems, leads to higher concentration of acid components in the engine oil (condensation), this phenomenon is controlled by the strong neutralising effect of this product.
- The low ash content (1.16%), the viscosity stability and the outstanding resistance to oxidation, even under extreme operating conditions, are other special properties of SAE 15W-40 LDX.

#### Use

SAE 15W-40 LDX is recommended especially for the use in EURO I, II, III and IV heavy duty diesel engines, with or without turbocharger, of trucks and buses operating under severe of conditions.

Thanks to his selected formulations, this product is suitable for use in diesel engines requiring a motor oil with specifications API CI-4, CH-4, CG-4, CF-4.

Also recommended for gasoline and diesel engines of passenger cars and light duty vehicles, with or without turbo.

Observe manufacturer's specifications and instructions before use.

#### **Specifications / Performance level**

ACEA E7 ACEA 2012: A3/B4 API CI-4, CH-4, CG-4, CF-4, CF / SL MB 228.3 MB 229.1 MAN M 3275, MAN M 271 VOLVO VDS-3, VDS-2 SCANIA EURO 4 (ACEA E7) RENAULT VI RLD, RLD-2

**DEUTZ DQC III-10 DETROIT DIESEL 93K215** MTU Typ 2 CATERPILLAR ECF 2, ECF-1-a MACK EO-M Plus, EO-N CUMMINS CES 20071/2/6/7/8 VW 501 01, 505 00 level (1997) ZF TE-ML 03A, 04C, 07C





# **ASTRIS SAE 15W-40 LDX**

Technical data	Unit	Method
Density at 15°C 0,884	1 g/cm <sup>3</sup>	ASTM D 1298
Viscosity at 40 °C 106	s mm²/s	ASTM D 445
Viscosity at 100 °C 14,3	3 mm²/s	ASTM D 445
Viscosity index 138	3	ASTM D 2270
Viscosity at – 20°C (CCS) 6640	) cP	ASTM D 5293
TBN 9,4	‡ mgKOH/g	ASTM D 2896
Sulphated ash 1,16	% mass	ASTM D 874
Flash point C.O.C. 226	S°C	ASTM D 92
Pour point -30	) °C	ASTM D 97

### Health, safety and environment

ADR / SDR: Not dangerous EU Waste List Code: 13 02 08