



# eni i-Sigma universal 4ID

PRODUCT DATA SHEET

**eni i-Sigma universal 4ID** is a multigrade oil suitable for the lubricant of all kinds of diesel engines including supercharged models installed in cars, trucks, buses, earthmoving, and pit-and-quarry equipment, as well as fixed plant such as generating sets, etc.

It may also be used in gasoline engines.

## CHARACTERISTICS (TYPICAL FIGURES)

### eni i-Sigma universal 4ID

SAE Grade		15W-40	20W-50
Appearance	-	B & C	B & C
Density at 15°C	kg/L	0.874	0.877
Viscosity at 100°C	cSt	15.3	20.0
Viscosity at 40°C	cSt	114.8	168.1
Viscosity at -20°C	cP	5800	-
Viscosity at -15°C	cP	-	6100
Viscosity Index	-	139	138
Flash Point COC	°C	234	240
Pour Point	°C	-26	-24
Total Base Number	mgKOH/g	10.2	10.2

## PROPERTIES AND PERFORMANCE

- Its detergent, dispersant, antioxidant, antirust and antiwear properties guarantee the following characteristics and performances:
- The multigrade characteristics of this product make it perfectly suitable for all types of diesel engines operating under wide range of temperature conditions. Seasonal oil changes are thus avoided and trucks can travel from one geographical and climatic zone to another, as occurs with international road transportation today, without trouble.
- There are no cold starting problems with **eni i-Sigma universal 4ID** despite its high "hot" viscosity.
- The detergent-dispersant properties of **eni i-Sigma universal 4ID**, together with its high and lasting capacity to neutralize combustion acid, place this product at high quality level. It keeps pistons clean and maintains solid product of combustion in suspension until the next oil change, thereby preventing the formation of dangerous deposits in the sump.
- These properties are ensured by a special combination of low-ash additives, fully meeting the standards issued by all manufacturers of four-stroke diesel engines.
- It possesses very good antioxidant properties which prevent deterioration that could alter the viscosity of the oil.
- Its superior antirust properties ensure effective protection of all parts of the engine.
- Its anti-wear properties remain fully effective throughout the period of service thus keeping the engine in the best possible condition.

## SPECIFICATIONS

**eni i-Sigma universal 4ID** meets the requirements of the following services and specifications:

- API CF-4/SG
- MB 228.1
- MAN 271
- ACEA E2-96
- MTU Type 1
- VOLVO VDS