



E-FORCE LE

FULLY SYNTHETIC / SEMI SYNTHETIC

PRODUCT DESCRIPTION:

E-FORCE LE is a synthetic, extra high-performance "low SAPS" diesel engine oil designed to protect high-performance diesel engines operating in severe conditions. It meets the latest heavy-duty truck OEM specifications for engines that comply with the Euro VI EU emission standard. E-FORCE LE is highly recommended for EGR diesel engines equipped with aftertreatment systems such as Diesel Particulate Filters (DPFs) and SCR NOx reduction systems.

APPLICATION:

It is intended to be used for naturally aspirated and turbo-charged diesel powered equipment, modern heavy-duty engines including those fitted with DPF (Diesel Particulate Filter), on-highway light and heavy-duty trucking and off-highway modern equipment.

FEATURES & BENEFITS:

- Protection against oil thickening, high temperature deposits, sludge build-up and, oil degradation
- Provides long drain intervals
- Excellent anti-wear, anti-scurf properties and bore polishing and corrosion protection.
- Stay-in-grade shear stability. Very low volatility
- Helps to reduce viscosity breakdown and oil consumption under heavy duty, high temperature operating conditions
- Low ash, Sulfur and phosphorous levels
- Helps to protect exhaust systems devices like those fitted with DPF
- Excellent low temperature properties
- Cold start-up wear protection

PERFORMANCE MEET OR EXCEEDS:

- API CI-4
- ACEA E6/E8
- Daimler MB 15C110/226.9
- MAN M3477/M3271-1
- Volvo VDS-3
- Renault RLD2/RXD/RGD
- MTU Type 3.1
- DAF Meet Requirements
- DEUTZ DQC III-10 LA
- Cummins CES 20076/77
- MACK EO-N
- JASO DH-2
- Voith Class B

TYPICAL PROPERTIES:

PARAMETERS	ASTM	UNIT	E-FORCE LE		
			5W-30	10W-30	10W-40
Grade			5W-30	10W-30	10W-40
Kinematic Viscosity @ 104°F /40°C	D7042	cSt	TBR	TBR	TBR
Kinematic Viscosity @ 212°F /100°C	D7042	cSt	11.9	11.8	15.2
Viscosity Index (min)	D2270	-	136	145	145
Density@15°C/ 60°F	D4052	g/cm ³	TBR	TBR	TBR
Flash Point (min)	D92	°C	220	220	220
Pour Point (max)	D97	°C	-39	-36	-36
TBN	D2896	mg KOH/g	10	10	10
CCS	D5293	m.Pa.S	<6600 (-30°C)	<7000 (-25°C)	<7000 (-25°C)

DISCLAIMER: The test data presented above is indicative and not a strict specification, as it may vary within acceptable production tolerances. Internal reserves the right to update or modify this test data. For the most accurate and current information, please refer to the latest version of this Technical Data Sheet (TDS).

HEALTH & SAFETY, ENVIRONMENT:

Continuous or repeated exposure to oil may lead to skin problems. Avoid contact with the oil. In case of contact, wash thoroughly with soap and water. Do not dispose of used oil in drains or the environment. Dispose of it at an authorized used oil collection point. For additional safety information, please refer to the MSDS available on our website at www.internal.net.

PROTECT THE ENVIRONMENT:

Take used oil to an authorized collection point. Comply with local regulation. Do not discharge into drains, soil or water.