

HDDEO



Technical Data Sheet

E-FORCE PLUS

FULLY SYNTHETIC

PRODUCT DESCRIPTION:

E-FORCE PLUS is a synthetic, high-performance heavy-duty diesel engine oil designed to extend engine life and improve fuel economy in modern diesel engines operating in extreme conditions. Meeting the API CJ-4 specification, E-FORCE PLUS uses cutting-edge technology to deliver outstanding performance in low-emission engines, including those equipped with Exhaust Gas Recirculation (EGR), Diesel Particulate Filters (DPFs), and Diesel Oxidation Catalysts (DOCs).

APPLICATION:

E-FORCE PLUS is recommended for use in 4-stroke diesel engines, including modern low emission engines with Exhaust Gas Recirculation (EGR), After-Treatment systems with Diesel Particulate Filters (DPF's) and Diesel Oxidation Catalysts (DOC's). Recommended for on-highway engines operating in both high speed / high load and stop-anDgo conditions, and Off-highway engines operating in severe low speed/heavy load conditions. Also suitable for high-performance gasoline engines and mixed fleets.

FEATURES & BENEFITS:

- Prevents premature DPF plugging and shortened maintenance intervals
- Minimizes piston and combustion chamber deposits
- Fights Sludge and Varnish
- Excellent against engine wear due to soot formation
- · Excellent oxidation, foam, and corrosion inhibition

PERFORMANCE MEET OR EXCEEDS:

- API CJ-4/SN
- ACEA E9/E11
- DTFR 15B1101
- Caterpillar ECF-3
- MAN M3477
- VOLVO VDS-4

TYPICAL PROPERTIES:

- Provides faster, and safe starts during extreme temperatures and increases thermal and oxidation stability at extreme high temperatures
- Extended engine life
- Renault RLD3
- DDC 93K218
- Mack EO-O PP
- Cummins CES 20081
- DEUTZ DQC III-18 LA
- FORD WSS-M2C171-F1

PARAMETERS	ASTM	UNIT	E-FORCE PLUS			
Grade			OW-30	0W-40	5W-30	5W-40
Kinematic Viscosity @ 104°F /40°C	D7042	cSt	TBR	TBR	TBR	TBR
Kinematic Viscosity @ 212°F /100°C	D7042	cSt	11.8	14.9	11.8	15
Viscosity Index (min)	D2270	-	160	170	160	160
Density@15°C/ 60°F	D4052	g/cm3	TBR	TBR	TBR	TBR
Flash Point (min)	D92	°C	220	220	220	220
Pour Point (max)	D97	°C	-39	-39	-39	-39
TBN	D2896	mg KOH/g	9.9	9.9	9.9	9.9
CCS	D5293	m.Pa.S	<6200 (-35°C)	<6200 (-35°C)	<6600 (-30°C)	<6600 (-30°C)

DISCLAIMER: The test data presented above is indicative and not a strict specification, as it may vary within acceptable production tolerances. Internol 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.internol.net.

PROTECT THE ENVIRONMENT:

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