



## EFORCE MINERAL

### PRODUCT DESCRIPTION:

EFORCE is a high-performance diesel engine oil designed to deliver exceptional lubrication for diesel engines. It optimizes performance in the latest heavy-duty diesel engines from the US, Europe, and Japan, including those operating under demanding conditions such as high loads and multi-trailer applications. With superior detergent, dispersant, and anti-wear properties, EFORCE ensures engine cleanliness while effectively managing soot, sludge, and piston deposits for reliable and efficient operation.

### APPLICATION:

Recommended for modern heavy-duty engines, wide range of turbo-charged and naturally aspirated diesel engines as well as all kinds of gasoline engines, all types of generators, trucks, construction machinery, passenger cars or mixed fleet comprising diesel and gasoline powered cars.

### FEATURES & BENEFITS:

- High thermal and oxidation stability
- Reduced sludge build-up, deposits and viscosity increase
- Stay-in-grade shear stability
- Excellent low temperature properties
- Wear protection and viscosity control
- Improved viscosity control and oil pumpability

### PERFORMANCE LEVELS / MEETS OR EXCEEDS:

- API CI-4/SL
- ACEA E7, A3/B3/B4
- MB 229.1
- MAN M3275-1
- Deutz DQC III-10
- JASO DH1
- Cummins CES 20076/20077/78
- Global DHD1
- MTU Type 2
- Allison C4
- Caterpillar ECF 1a, ECF 2
- DDC 93K215

### OEM Approvals:

- DTFR 15B110
- Volvo VDS-3
- Mack EO-N
- Renault VI RLD-2

### API LICENSE:

- SAE 15W-40



### TYPICAL PROPERTIES:

PARAMETERS	ASTM	UNIT	EFORCE		
			15W-40	20W-40	20W-50
Grade			15W-40	20W-40	20W-50
Kinematic Viscosity @ 104°F / 40°C	D7042	cSt	TBR	TBR	TBR
Kinematic Viscosity @ 212°F / 100°C	D7042	cSt	15.3	14.5	19.6
Viscosity Index (min)	D2270	-	135	120	120
Density@15°C/ 60°F	D4052	g/cm <sup>3</sup>	TBR	TBR	TBR
Flash Point (min)	D92	°C	220	220	220
Pour Point (max)	D97	°C	-33	-24	-24
TBN	D2896	mg KOH/g	11	11	11
CCS	D5293	m.Pa.S	<7000 (-20°C)	<9500 (-15°C)	<9500 (-15°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](http://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.