

# Lubricant for Turbo Diesel engines with DPF 100% Synthetic – ACEA E9 Low SAPS

## **TYPEOFUSE**

Lubricant specially designed for the last generation of trucks, buses, construction machinery, farm machinery, stationary engines, boat engines running with low sulphur fuel (=< 50 ppm). Low emissions turbo Diesel direct injection engines, Euro II, Euro III, Euro IV or Euro V emission regulation compliant, fitted with EGR System (Exhaust gas re-circulation) and/or SCR (Selected Catalyst Reduction) system and with or without DPF (Diesel Particulate Filter), working in highly severe conditions of load and service, requiring an engine oil ACEA E9 "Low SAPS" with reduced content of sulphated ash (=<1.0%), phosphorus (=< 0.12 %) and sulphur (=< 0.4%).

### PERFORMANCE

STANDARDS:<br/>PERFORMANCES:ACEA E9 / E7 (E7 replace E5 and E3), API CJ-4<br/>VOLVO VDS-4, MB 228.31, Renault VI RLD-3,<br/>Mack EO-O Premuim plus, MAN 3275, Caterpillar ECF-2, ECF-3,<br/>Detroit Diesel 93K214, 93K215, 93K218, DEUTZ DQC III-05, DQC IV-<br/>05, Global DHD-1, JASO DH-2, MTU Type II, Cummins CES 20081,<br/>Mack EO-N Premium Plus.

First "universal" lubricant Low SAPS with API CJ-4 standard, 100% Synthetic. Ensures protection and longevity of engines fitted with EGR systems:

- Dispersant and anti-oxidation properties: protection against soot builds up and oil filter plugging.
- Superior Anti-Wear level: bore polishing protection.
- Superior detergent level: piston cleanliness and piston groove deposits control.
- Viscosity grade at cold temperature minimize wear when engine start up and save fuel compare to a standard viscosity 15W-40.

New ACEA E9 is dedicated for lubricants intended for use in truck engines fitted with DPF. Reduced SAPS content enhance DPF lifetime and avoid DPF clogging.

Engines compliant with Euro IV or Euro V emission regulation are fitted with sensitive exhaust gas after treatment systems:

- Sulphur and Phosphorus inhibit catalytic converters operation and can damage catalytic components: inefficient exhaust gas treatment.
- Sulphated Ash clog diesel particulate filters: shorter DPF lifetime and engine power loss.

## RECOMENDATIONS

Drain interval: refer to manufacturers' recommendations and tune to your own use. Can be mixed with synthetic or mineral oils.

#### **PROPERTIES**

Viscosity grade	SAE J300	<b>5W-40</b>
Density at 20°C (68°F)	ASTM D1298	0.852
Viscosity at 40°C (104°F)	ASTM D445	89.6 mm²/s
Viscosity at 100°C (212°F)	ASTM D445	14.5 mm²/s
Viscosity index	ASTM D2270	169
Flash Point	ASTM D92	222°C
TBN	ASTM D2896	10.3 mgKOH/g
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Sulphated Ash	ASTM D874	0.99 wt%