

VIRO-TEC Fully Synthetic Diesel Engine Oil SAE 0W-40 CK-4/SN

Product Description

VIRO-TEC 0W-40 CK-4/SN is a fully synthetic, high-performance diesel engine oil formulated to provide outstanding wear protection and engine cleanliness under severe driving conditions. Its wide temperature range and robust base oils ensure optimal lubrication at cold start and during high-temperature operations. Specifically engineered for new-generation diesel engines with advanced emission control systems such as DPF, SCR, and EGR, VIRO-TEC 0W-40 CK-4 also offers backward compatibility for older engines, making it suitable for mixed fleets operating in demanding climates or terrain.

Performance Benefits

- **Wider Temperature Operation:** Delivers instant flow in extreme cold and protection in extreme heat
- **Fuel Efficiency:** Advanced low-friction formula contributes to lower fuel consumption
- **Soot and Deposit Control:** Keeps pistons and vital components clean for longer engine life
- **Emission System Protection:** Low-SAPS additive system minimizes clogging in DPF and SCR
- **High Shear Stability:** Maintains viscosity under high-load, high-shear operating conditions
- **Extended Drain Capability:** Advanced base oils and additives allow for extended oil drain intervals

Application

- Heavy-duty diesel engines meeting Euro V/VI emissions regulations
- Trucks, buses, off-road construction, agricultural and mining equipment
- Engines equipped with DPF, SCR, EGR, and DOC after-treatment systems
- Suitable for fleets requiring cold weather starting and protection
- Compatible with biodiesel blends and designed for API CK-4 specifications

Meets and Exceeds

Meets:

- API: CK-4 / SN
- ACEA: E4, E8, E11
- **OEM Approvals:**
- MB 228.5 / MB 228.51
- Volvo VDS-4.5
- Mack EOS-4.5
- Renault RLD-3
- MAN M3377
- MTU Type 3.1
- DQC IV-18 LA
- Caterpillar ECF-3
- Cummins CES 20086
- DDC 93K222
- Scania LDF-4

Typical Properties

Property	Method	Units	Value
SAE Grade	SAE J300	-	0W-40
Density @ 15°C	ASTM D4052	g/cm ³	0.846
Kinematic Viscosity @ 40°C	ASTM D445	mm ² /s	87.50
Kinematic Viscosity @ 100°C	ASTM D445	mm ² /s	14.20
Viscosity Index	ASTM D2270	-	175
Pour Point	ASTM D97	°C	-45
Flash Point	ASTM D92	°C	232
Sulfated Ash	ASTM D874	% wt	0.98
TBN	ASTM D2896	mg KOH/g	10.5
Noack Volatility	CEC L-40-A-93	% loss	9.2
Cold Cranking Viscosity	ASTM D5293	mPa·s	6000 @ -35°C



Health, Safety, and Environment

- Always follow local regulations for waste oil disposal
- GHS-compliant Safety Data Sheets (SDS) available upon request

Care and Handling

- Store in sealed containers away from moisture and direct sunlight.
- Avoid prolonged contact with skin; wear gloves during handling.

