

VIRO-TEC Fully Synthetic Diesel Engine Oil SAE 5W30 CK-4

Product Description

VIRO-TEC 5W-30 CK-4 is a fully synthetic, heavy-duty diesel engine oil designed with advanced low-SAPS technology. It ensures exceptional engine cleanliness, outstanding wear protection, and superior performance under severe operating conditions. Engineered for modern low-emission diesel engines equipped with advanced after-treatment systems like DPF, DOC, SCR, and EGR, it is also compatible with older diesel engines. VIRO-TEC 5W-30 CK-4 supports fuel economy, enhances durability, and extends oil drain intervals.

Application

- Modern heavy-duty diesel engines meeting Euro V/VI emission standards.
- Engines equipped with Diesel Particulate Filters (DPFs) and Selective Catalytic Reduction (SCR) systems.
- Suitable for both on-road vehicles (long-haul trucks and buses) and off-road equipment (construction, mining, and agriculture).
- Compatible with biodiesel fuel formulations and vehicles requiring API CK-4 performance.

Performance Benefits

- **Fuel Efficiency:** Enhances fuel economy through low-friction and low-viscosity formulation.
- **Extended Oil Drain Intervals:** Designed to support long service intervals while maintaining engine performance.
- **Cold Start Protection:** Exceptional low-temperature performance ensures fast lubrication at startup, reducing engine wear.
- **Wear and Corrosion Resistance:** Protects critical engine components against wear, sludge, and acid-related corrosion.
- **Emission System Durability:** Low-SAPS formulation minimizes deposits in DPF and SCR systems.
- **Engine Cleanliness:** Superior detergent and dispersant properties prevent soot and deposit build-up.

Performance Standards and Approvals

- **ACEA Specifications:** E4, E6, E7, E9.
- **API Standards:** CK-4, SN.
- DTFR 15C110 (MB 228.51)
- MB 228.5
- Volvo VDS 3/4.5
- Mack EOS-4.5/EO-N
- Renault RLD-3
- MTU 3.1
- DQC IV-18
- Caterpillar ECF-3
- MAN M2377/M3377
- CES 20086
- DDC 93K222
- Scania LDF-4

Typical Properties

Property	Method	Units	Value
SAE Grade	SAE J300	-	5W-30
Density @ 15°C	ASTM D4052	g/ml	0.8465
Kinematic Viscosity @ 40°C	ASTM D445	mm ² /s	69.36
Kinematic Viscosity @ 100°C	ASTM D445	mm ² /s	12.18
Viscosity Index	ASTM D2270	-	173
Pour Point	ASTM D97	°C	-39
Flash Point	ASTM D92	°C	230
Sulfated Ash	ASTM D874	% wt	0.46
TBN	ASTM D2896	mg KOH/g	10.12
Noack Volatility	CEC L-40-A-93	% Loss	9.50
Cold Cranking Viscosity	ASTM D5293	mPa.s (cP)	5500 @ -30°C



Safety and Environment

- Dispose of used oil responsibly at authorized collection facilities.
- GHS-compliant Safety Data Sheets (SDS) available upon request.

Care and Handling

- Store in a cool, dry location away from direct sunlight and temperatures above 60°C.
- Use appropriate personal protective equipment (PPE) to prevent prolonged skin contact.

