

TECHNICAL DATA SHEET

ECO MATIC 15W-40 CJ-4

Heavy-Duty Diesel Engine Oil — Smoke Free Technology

API CJ-4 • API CI-4+ • API CH-4 • API SL

PRODUCT DESCRIPTION

ECO MATIC 15W-40 CJ-4 is a premium synthetic blend heavy-duty diesel engine oil formulated to meet API CJ-4 — the most advanced heavy-duty diesel specification, designed for low-emission engines equipped with Diesel Particulate Filters (DPF) and Exhaust Gas Recirculation (EGR) systems. Featuring proprietary Smoke Free Technology, it significantly reduces visible exhaust emissions for cleaner fleet operation. The 15W-40 viscosity grade offers broader temperature coverage than 20W-50, providing faster cold-start protection while maintaining strong film strength at high operating temperatures. API CJ-4 enforces tighter limits on sulfated ash, phosphorus, and sulfur compared to CI-4+, preserving aftertreatment system integrity and extending DPF service life.

APPLICATIONS

- Heavy-duty turbocharged diesel engines in trucks, buses, and commercial vehicles
- Low-emission engines with DPF and EGR systems meeting 2007+ emission standards
- Long-haul transport, urban fleet, and mixed on/off-highway diesel applications
- Construction, agricultural, and mining equipment requiring API CJ-4 specification
- Engines operating in variable ambient temperatures requiring wider viscosity coverage
- Backward compatible with CI-4+, CH-4, CG-4, and CF-4 diesel specifications
- Available in 18L jerry can and 200L drum

PERFORMANCE STANDARDS

API CJ-4 • API CI-4+ • API CH-4 • API SL • ACEA E9 • Mack EOS-4.5 • Cummins CES 20086 • Volvo VDS-4

FEATURES & BENEFITS

- Meets API CJ-4 — advanced heavy-duty diesel protection with full DPF/EGR compatibility
- Proprietary Smoke Free Technology — significantly reduces visible exhaust emissions
- Wider 15W-40 temperature range — faster cold-start versus 20W-50 for mixed climates
- Low ash formulation (CJ-4 limits) — preserves DPF and aftertreatment system life
- Outstanding soot dispersancy prevents viscosity increase and filter plugging
- Superior TBN retention neutralises acidic combustion by-products over extended drains
- Excellent anti-wear protection for turbocharger, pistons, liners, and valve train
- Backward compatible with all earlier API diesel categories (CI-4+, CH-4, CG-4, CF-4)

TYPICAL PROPERTIES

TEST PARAMETER	TEST METHOD	TYPICAL VALUE
Appearance	Visual	Clear, Amber Liquid
SAE Viscosity Grade	—	15W-40
API Service Classification — Diesel	—	CJ-4
API Service Classification — Petrol	—	SL
Kinematic Viscosity @ 40°C (cSt)	ASTM D445	108
Kinematic Viscosity @ 100°C (cSt)	ASTM D445	15.5
Viscosity Index	ASTM D2270	135 min
Flash Point, COC (°C)	ASTM D92	228 min
Pour Point (°C)	ASTM D97	-27 max

TEST PARAMETER	TEST METHOD	TYPICAL VALUE
Total Base Number (mg KOH/g)	ASTM D2896	11.0 min
Sulfated Ash (% wt)	ASTM D874	1.0 max
Phosphorus Content (% wt)	ASTM D5185	0.12 max
Sulfur Content (% wt)	ASTM D5185	0.4 max
Density @ 15°C (kg/L)	ASTM D4052	0.876
HTHS Viscosity @ 150°C (mPa·s)	ASTM D4683	3.5 min
Copper Corrosion @ 100°C, 3 hrs	ASTM D130	1B max
Foam Tendency/Stability @ 24°C (ml/ml)	ASTM D892	300/0 max

STORAGE & HANDLING

Store the product indoors and avoid direct sunlight or heat. Keep containers tightly closed when not in use. Avoid contact with skin and eyes. After skin contact, wash thoroughly with soap and water. Keep out of reach of children.

DISCLAIMER: The information provided in this Technical Data Sheet is based on standard laboratory tests and is indicative only. Synergy Lubricant and Chemical makes no warranty regarding the accuracy of this data. Typical values may vary within acceptable production tolerances.

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