

2140 SYNSHIELD® MBX-300 SAE 15W-40 API CK-4

SynShield® MBX-300 SAE 15W-40 is a high performance, petroleum based, heavy-duty diesel engine oil specially formulated to provide equipment durability and longevity.

SynShield® MBX-300 SAE 15W-40 exceeds the requirements for API heavy-duty diesel engine oil Service Categories: CK-4, CJ-4, CI-4, CI-4 Plus and older. The product is suitable for use in emission compliant engines that utilize heavy EGR and exhaust after-treatment devices such as Diesel Particulate Filters (DPFs) with or without Diesel Oxidation Catalysts (DOCs) and Selective Catalytic Reduction (SCR).

SynShield® MBX-300 SAE 15W-40 provides high performance in low-emission certified diesel engines that are equipped with EGR, older non-EGR containing diesel engines, and off-highway diesel engines.

SynShield® MBX-300 SAE 15W-40 provides the following performance advantages:

PERFORMANCE

- Improved fuel economy benefits and excellent fuel economy retention
- Good cold cranking startability and low temperature pumpability
- Increased engine life and durability especially for older model engines
- Engine protection during high mileage/hour accumulation, standard oil drains and severe idling time for maximized uptime and reliability*

DEPOSIT PROTECTION

- Enhanced detergency and dispersency to provide high temperature piston cleanliness
- Protection against deposits and better soot-handling than conventional CK-4 oils
- Greater thermal and oxidative stability for resistance to viscosity thickening and the formation of deposits, sludge and varnish on critical engine parts.
- Enhanced engine cleanliness for longer filter life and protection against filter plugging

WEAR PROTECTION

- Superior wear protection—less wear than conventional CK-4 oils
- Exceptional ring and liner wear protection that results in improved oil consumption control
- Superior resistance to corrosive and abrasive wear
- Exceptional valve-train wear protection
- Excellent protection against oxidation and corrosion in the presence of biodiesel

SynShield® MBX-300 SAE 15W-40 also contains two proven frictional modifiers Micron Moly® and Schaeffer Mfg's own proprietary additive Penetro®. These two proven frictional modifiers once plated, form a long lasting, slippery, tenacious lubricant film, which prevents the metal surfaces from coming into contact with each other. By preventing metal-to-metal contact, damaging frictional wear is reduced which results in reduced wear, increased engine life and lower maintenance costs.

SynShield® MBX-300 SAE 15W-40 meets and exceeds the following manufacturers' specifications and requirements: API Service Classifications CK-4/CJ-4; Military Specification MIL-PRF-2104K; ACEA E7-22; ACEA E11-22; Global Specification DHD-1; Caterpillar ECF-3; Cummins CES 20081, CES 20086; Detroit Diesel Power Guard Oil Specifications: DDC93K218 and DDC93K222; Deutz DQC III-10 LA; Ford WSS-M2C171-E, WSS-M2C171-F1; JASO DH-2; Mack EO-O Premium Plus, Mack EOS-4.5; MAN 3275, MAN 3575; MB 228.3; MB 228.31; MTU Category Type 2 and 2.1; Renault VI RLD-3, RLD-4; Scania LDF-2; Volvo VDS 4, VDS 4.5; Navistar; John Deere; CHN (Case-New Holland).

***Please use WebScope used oil analysis to determine oil drain interval extensions.**

Using Schaeffer lubricants does not void your new vehicle warranty or equipment manufacturer's warranty. All Schaeffer lubricants are covered by our Limited Warranty.

**The use of OEM names, trademarks or specifications does not represent approval, recommendation, or licensing by the OEM.*

TYPICAL PROPERTIES

SAE GRADE

	15W-40
Specific Gravity @ 60°F/15°C	0.881
Viscosity 40°C cSt (ASTM D445)	120.41
Viscosity 100°C cSt (ASTM D445)	15.78
Viscosity Index (ASTM D2270)	139
CCS Viscosity @ -20°C cP (ASTM D5293)	6404
Mini-rotary Viscosity-TP1 @ -25°C cP (ASTM D4684)	20,300
High Temperature High Shear Viscosity 302°F/150°C cP (ASTM D4683)	4.3
Flash Point °F/°C (ASTM D92)	458.6°/237°
Pour Point °F/°C (ASTM D97/D5950)	-43.6°/-42°
Sulfated Ash Content % Wt. (ASTM D874)	<1
Total Base Number (ASTM D2896)	9.9
Noack Volatility % Evaporative Loss (ASTM D5800)	10.4
Shear Stability % Viscosity Loss – 90 Passes (ASTM D7109)	13.6