



TECHNICAL DATA

102 Barton Street, St. Louis MO 63104
Ph: 800-325-9962 / Fax: 314-865-4107
www.schaefferoil.com



6000 SYNSHIELD™ MAX MPG SAE 10W-30 API FA-4

SynShield™ Max MPG SAE 10W-30 is a premium, advanced performance, synthetic plus, heavy-duty diesel engine oil specially formulated to provide maximum protection against wear, oxidation, deposit formation, soot contamination and aeration in 2017 and newer engines that specify an API FA-4 engine oil.

SynShield™ Max MPG SAE 10W-30 is formulated to offer increased fuel economy benefits beyond those typically provided by most SAE 10W-30 engine oils, while still offering excellent outstanding wear protection, extended drain capability, high temperature performance and engine cleanliness.

SynShield™ Max MPG SAE 10W-30 provides the following performance advantages:

- Improved fuel economy benefits and excellent fuel economy retention
- Superior wear protection
- Superior thermal and oxidative stability resulting in a greater resistance to viscosity thickening and the formation of deposits, sludge and varnish on critical engine parts
- Superior protection against deposits
- Excellent soot dispersency for protection against soot overloading
- Enhanced detergency and dispersency to provide high temperature piston cleanliness
- Superior engine cleanliness
- Longer filter life: excellent protection against filter plugging especially during high soot conditions
- Exceptional valve-train wear protection
- Exceptional ring and liner wear protection that results in improved oil consumption control
- Excellent protection against oxidation and corrosion in the presence of biodiesel
- Excellent shear stability for stay-in-grade performance throughout the entire oil drain interval
- Excellent cold cranking startability and low temperature pumpability to ensure the engine oil reaches critical engine parts faster in colder temperatures in order to minimize wear
- Low ash formula helps protect exhaust catalysts and particulate filters on low emission vehicles
- Superior low volatility characteristics to control oil consumption
- Excellent protection against oil aeration and foaming
- Excellent resistance to corrosion
- Superior resistance to corrosive and abrasive wear
- Excellent gasket and seal life
- Prolonged after-treatment (DPF and DOC) life
- Longer drain intervals for lower overall maintenance costs
- Improved overall and optimized engine durability and reliability

Continued on next page

Further blended into SynShield™ Max MPG SAE 10W-30 are two proven frictional modifiers, Micron Moly®, a liquid soluble type of moly, and Schaeffer Mfg.'s own proprietary additive Penetro®. Once plated, these frictional modifiers form a long lasting, slippery, tenacious lubricant film, which prevents metal-to-metal contact and damaging frictional wear which results in:

- Increased fuel economy
- A low coefficient of friction
- Significantly less bearing, ring, piston, cylinder and valve-train wear
- Increased engine efficiency, durability and life
- Less downtime with reduced maintenance

SynShield™ Max MPG SAE 10W-30 meets and exceeds the following manufacturer's specifications and requirements: API Service Classification FA-4; Cummins CES 20086; Detroit Diesel DDC93K223; JASO DH-2

SynShield™ Max MPG SAE 10W-30 should only be used in heavy-duty on-road trucking applications where an API FA-4 oil is recommended by the OEM. Before using SynShield™ Max MPG SAE 10W-30, users should consult the engine oil recommendations as shown in an owner's manual or other service bulletins.

TYPICAL PROPERTIES

SAE GRADE	10W-30
Specific Gravity @ 60°F/15°C	.8623
Viscosity 40°C cSt (ASTM D-445)	67.03
Viscosity 100°C cSt (ASTM D-445)	9.98
Viscosity Index ASTM D-2270	143
CCS Viscosity @ -25°C cP (ASTM D-5293)	4763
Mini-rotary Viscosity-TP1 @ -30°C cP (ASTM D-4684)	10,800
High Temperature High Shear Viscosity 302°F/150°C cP (ASTM D-4683)	3.11
Flash Point °F/°C (ASTM D-92)	466°/241°
Pour Point °F/°C (ASTM D-97/D-5950)	-45°/-43°
Sulfated Ash Content % Wt. (ASTM D-874)	1
Total Base Number (ASTM D-2896)	10
Noack Volatility % Evaporative Loss (ASTM D-5800)	11.1
Shear Stability % Viscosity Loss – 90 Passes (ASTM D-7109)	9.96%
TEOST MHT (ASTM D-7097) Total Deposits, mg	20.7