

723 SYNSHIELD™ ULTRA PERFORMANCE SAE 5W-30 API CK-4

SynShield™ Ultra Performance SAE 5W-30 is a premium advanced performance, synthetic, heavy-duty diesel engine oil specially formulated to provide maximum protection against wear, oxidation, deposit formation, soot contamination and aeration.

SynShield™ Ultra Performance SAE 5W-30 is built for on-highway and off-highway applications that are subjected to severe stop-and-go, excessive idling, short haul and/or severe duty operating conditions.

SynShield™ Ultra Performance SAE 5W-30 provides the following performance advantages:

- Superior wear protection— 85% less wear than conventional CJ-4 oils
- Superior thermal and oxidative stability resulting in a greater resistant to viscosity thickening and the formation of deposits, sludge and varnish on critical engine parts
- Superior protection against deposits – 77% greater soot-handling than conventional CJ-4 oils
- Excellent soot dispersency for protection against soot overloading
- Enhanced detergency and dispersency to provide high temperature piston cleanliness.
- Superior engine cleanliness
- Longer filter life and excellent protection against filter plugging especially during high soot conditions
- Exceptional valve-train wear protection
- Exceptional ring and liner wear protection against wear and contamination that results in improved oil consumption control
- Improved fuel economy benefits and excellent fuel economy retention even under the most severe and harshest operating conditions
- 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 temperature 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
- Increased engine life and durability especially for older model engines
- Improved overall engine durability and reliability
- Minimized total cost of operation

Further blended into SynShield™ Ultra Performance SAE 5W-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™ Ultra Performance SAE 5W-30 meets and exceeds the following manufacturers' specifications and requirements: API Service Classifications CK-4/CJ-4; Military Specification MIL-PRF-2104K; ACEA E7-12; ACEA E9-12; Global Specification DHD1; Caterpillar ECF-3; Cummins CES 20086; Detroit Diesel Power Guard Oil Specifications: DDC93K218 and DDC93K222; Ford WSS-M2C171-E; JASO DH-2; Mack EO-O Premium Plus, Mack EOS-4.5; MAN 3275, MAN 3575; MB 228.3, MB 228.31; MTU 2.1; Scania LDF-2; Volvo VDS 4, VDS 4.5; Navistar.

TYPICAL PROPERTIES

SAE GRADE	5W-30
Specific Gravity @ 60°F/15°C	.8621
Viscosity 40°C cSt (ASTM D445)	65.81
Viscosity 100°C cSt (ASTM D445)	11.09
Viscosity Index ASTM D2270	161
CCS Viscosity @ -30°C cP (ASTM D5293)	4265
High Temperature High Shear Viscosity 302°F/150°C cP (ASTM D4683)	3.29
Flash Point °F/°C (ASTM D92)	466°/241°
Pour Point °F/°C (ASTM D97)	-49°/-45°
Sulfated Ash Content % Wt. (ASTM D874)	1
Total Base Number (ASTM D2896)	10
Noack Volatility % Evaporative Loss (ASTM D5800)	10.7
TEOST MHT (ASTM D7097) Total Deposits, mg	20.7