



Super S[®] FG-2000 CJ-4 Synthetic Blend

Super S FG-2000 CJ-4 motor oil is a high performance, **low-ash** blend of synthetic and mineral base oils in a sophisticated additive package that meets or exceeds the performance and service requirements of the latest fuel economy standards while exceeding the specifications for wear control, piston deposits, cleanliness, varnish and sludge, oxidation control, and emission system and seal compatibility. It is suitable for virtually all on-highway and off-highway service applications.

Super S FG-2000 CJ-4 features a new "**Low-SAPS**" additive technology to exceed API CJ-4/SN, CI-4 Plus specifications providing exceptional performance, long drain interval capability, and protection of exhaust systems including those fitted with Diesel Particulate Filters (DPF).

The "**Low-SAPS**" additive technology allows FG-2000 CJ-4 to meet the requirements of ACEA E9-16 while being future proof to ACEA E9-18. Protective power is further enhanced by using a blend of low pour point synthetic and thermally stable hydrocracked base oils to deliver our most fuel efficient heavy duty engine oil to date.

FEATURES/ BENEFITS

- Meets or exceeds requirements of today's high performance, low emission diesel engines while providing excellent performance in older engines allowing operators use of one oil for many engines.
- Provides significantly improved wear protection deposit and viscosity control and oxidation resistance.
- Provides excellent protection and durability demonstrated in control of valve train wear and piston ring and liner wear, helping to prolong engine life.
- **Low-ash** technology provides improved soot control and an exclusive detergent system for outstanding engine cleanliness.
- Demonstrates exceptional low temperature flow properties which helps to speed cold starts.
- Demonstrates reduced fuel consumption.
- Demonstrates performance reserve throughout the oil drain interval for full protection and lubrication throughout the entire oil drain interval.
- "**Low-SAPS**" technology eliminates after-treatment poisoning helping to maintain emissions compliance
- Simplifies inventories- one oil for all your 4-stroke engines; gasoline and diesel

APPLICATIONS

- Engines calling for API CJ-4, CI-4 Plus, CI-4, SN, SM, SL
- Meets needs of all the 4-stroke engines in a fleet that call for a CJ-4 rated engine oil
- Satisfies requirements for naturally aspirated and turbocharged engines
- Most 2007 emissions compliant engines and 2010 SCR and EGR emission compliant engines
- Excellent for use in engines with shorter piston crowns, higher power density, inter-cooling, electronic fuel management, exhaust gas recirculation, and exhaust particulate traps
- Meets needs of the older engines in on-highway service
- Satisfies off-highway engines calling for multi-grade engine oils
- Applications requiring use of a **Low-SAPS** or **low-ash** engine oil
- Construction, agricultural, and mining equipment operating under normal to severe service conditions
- Mobile and stationary industrial engines
- Mixed fleet use

RECOMMENDATIONS/SPECIFICATIONS

Super S FG-2000 CJ-4 is licensed as API Service Categories CJ-4/SN with CI-4 Plus and is backwards compatible to CI-4 and CH-4

Meets requirements of :

ACEA - E9-16

Cummins - CES 20081

DHD-1

Mack - EO-O Premium Plus 07

Mercedes-Benz - 228.3

Renault - RLD-3

Caterpillar - ECF-1, ECF-2, ECF-3

Detroit Diesel - DFS93K218

JASO DH-2

MAN - M3275

Navistar

Volvo - VDS 4

Ford WSS-M2C171-E

Special handling, notices or Warnings

Use the same care and handling that you would use with petroleum products.

TYPICAL CHARACTERISTICS

Super S FG-2000 Synthetic Blend Engine Oil			
<i>Property</i>	<i>Test Method ASTM -D</i>	<i>SAE Viscosity Grade</i>	
		10W-30	15W-40
Density	4052	7.25	7.31
Flash Point °C/ °F	92	220/430	229/444
Pour Point °C/ °F	97	-33/-36	-30/-22
Cold Cranking Viscosity	5293	<7000@-25C	<7000@-20C
Viscosity cSt @ 40°C cSt @ 100°C	445	66.85 10.94	108.0 15.4
VI	2270	155	150
Sulfated Ash wt %	874	1.0 max	1.0 max
TBN	2896	7.8	7.9

Typical test data are average values only.
Minor variations which do not affect product performance are to be expected during normal manufacturing.