



Updated & Improved

SWEPCO 310

ADVANCED TECHNOLOGY IN LUBRICATION SINCE 1933

PERFORMANCE

Premier Diesel and Gasoline Engine Oil

■ Advanced anti-oxidant chemistry reduces high temperature deposits by as much as 50% over conventional oils

- API CK-4
- Daimler MB 228.31*, 229,2
- Caterpillar ECF-3
- Deutz DQC
- Ford WSS-M2C171-F1**
- JASO DH-2
- DFS 93K222*
- Mack EOS 4.5
- Cummins CES 20100
- Paccar
- GM 6094M, Dexos 1 Gen 2
- Ford WSS-M2C946-B1-5W30
- Chrysler MS 6395M
- API SN¹, SN PLUS¹, SP¹ PLUS
- MTU Type 2.1*
- E7/E11(2022)*
- Cummins CES 20086/20087
- III-18 LA*
- Volvo VDS 4.5
- China D1
- MAN 3775*
- Renault RLD 3
- ILSAC GF-6
- Ford WSS-M26945-B1-5W20
- Ford WSS-M2C947-B1-0W20
- MIL L 46152D and CID AA 52039B



No compromises here. SWEPCO 310 exceeds the industry's most demanding performance requirements, especially for 2017 and later low emission over-the-road diesel engines.

SWEPCO 310 Premier Engine Oil is a high performance synthetic, multi-grade, long drain engine oil, especially formulated to provide industry leading protection from heat, wear and contaminants.

SWEPCO 310 not only meets, but exceeds, the unique service requirements of diesel engines equipped with low emission systems, such as diesel particulate filters (DPF), exhaust gas recirculation (EGR) and diesel oxidation catalysts (DOC).

To meet the cleanliness challenges of these modern engine systems and **ultra-low sulfur diesel fuels**, SWEPCO 310 has been carefully formulated to provide:

- Superior engine & filter cleanliness
- Superior oxidation resistance for longer drain service
- Added control of abrasive wear, particularly in liners and top rings
- Backwards compatible with older engines
- Ideal for gasoline engines, provides better cleanliness and wear protection in today's engines

- 0W20 available for modern gasoline engines
- High, stable TBN for longer service life and better protection from corrosive gases and contaminants
- Superior film thickness and shear stability

SWEPCO 310 achieves this new level of performance with the very finest *Syntheon™* synthetic base stock blends and the most advanced additive chemistry, including *Moly^{xp}*, SWEPCO's proprietary anti-wear/extreme pressure additive and proprietary state-of-the-art anti-oxidant chemistry.

For those who require the absolute best in performance from new generation over-the-road diesel engines, SWEPCO 310 is the very best choice. Because it is backwards compatible, it provides a new generation of protection for older diesel engines, off-road diesel equipment, gasoline engines and mixed fleets.

Compatible with all gasoline emission controls.

Protect your engines with the *premium* choice ... SWEPCO 310.

Feature	Benefit
<i>Syntheon™</i> Synthetic Base Stock Blends	<ul style="list-style-type: none"> • Insure more uniform viscosity over a wide temperature range • Help improve high temperature oxidation and thermal stability • Better low temperature flow characteristics help reduce start-up wear • Extend service life
Multi-Grade	<ul style="list-style-type: none"> • Meets the requirements of more than one viscosity grade, resulting in a lubricant that bears the benefits of both viscosities • Made to lubricate effectively over a wider temperature range than a single grade oil allowing you to keep lubrication simple year-round
<i>Moly^{XP}</i>	<ul style="list-style-type: none"> • Acts as a synergist along with other anti-wear additives to eliminate premature wear and reduce friction • Helps improve fuel economy by reducing friction and drag • Insures protection from extreme pressures
State-of-the-Art Oxidation Inhibitors	<ul style="list-style-type: none"> • Reduce oil thickening and deposits by as much as 50%; extend oil life • Help prevent sludge, varnish and carbon deposits that result from oxidation
TBN Booster/Stabilizer	<ul style="list-style-type: none"> • Increase ability to neutralize harmful acids and corrosives • Lengthen service life
Rust and Corrosion Inhibitor	<ul style="list-style-type: none"> • Builds a chemical bond with the surface to keep moisture and acids from penetrating and attacking the surfaces
Anti-Foam Additive	<ul style="list-style-type: none"> • Can lower oil operating temperatures by 25-50° F by dispersing the foam and releasing the trapped heat
Oiliness Additive	<ul style="list-style-type: none"> • Enables the oil to penetrate the surface for better lubrication
Anti-wear Inhibitor	<ul style="list-style-type: none"> • Helps prevent friction and wear • Helps prevent metal to metal contact
Detergent Additive	<ul style="list-style-type: none"> • Helps keep engine parts clean, neutralizes acids formed during combustion
Dispersant Additive	<ul style="list-style-type: none"> • Helps keep solid contaminants in the oil in colloidal suspension, preventing sludge and varnish deposits on engine parts
Pour Point Depressant Additive	<ul style="list-style-type: none"> • Gives the oil better low temperature flow characteristics • Helps to reduce low temperature start-up wear
Viscosity Index Improver Additive	<ul style="list-style-type: none"> • Less high temperature thinning and low temperature thickening
Saves Fuel	<ul style="list-style-type: none"> • Increased "oiliness" provides anti-friction film to reduce fuel consumption
Long Life	<ul style="list-style-type: none"> • Works harder for a longer period of time thus easing the cost and your worries about waste oil disposal
Lab Tec SM Fluid Analysis Program	<ul style="list-style-type: none"> • Maximizes equipment and lubricant life and pinpoints impending problems • Reduces waste
Multi-Purpose	<ul style="list-style-type: none"> • Meets both diesel and gasoline specifications

Exceeds Performance Requirements of the Following Specifications:

- API CK-4
- Daimler MB 228.31*, 229.2
- Caterpillar ECF-3
- Deutz DQC
- Ford WSS-M2C171-F1**
- JASO DH-2
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- MAN 3775*
- Renault RLD 3
- ILSAC GF-6
- Ford WSS-M26945-B1-5W20
- Ford WSS-M2C947-B1-0W20
- MIL L 46152D and CID AA 52039B

Typical Properties:

SAE Engine Oil Grade	5W30	10W30	15W40	5W40	0W20	5W20
API Spec(s)	CK4/FA4	CK4/FA4	CK4	CK4	SP+	SP+
Viscosity, cSt @ 40° C	59.16	86.59	112.91	96.43	43.0	41.8
Viscosity, cSt @ 100° C	10.12	12.75	15.6	14.78	8.01	7.76
Viscosity Index	159	145	146	160	164	158
Pour Point °F/°C	-40	-40	-35C(-31F)	-40(-40)	-40(-40)	-40(-40)
Flash Point °F	430	430	440	440	420	420
Flash Point °C	221	221	227	227	215	225
Lb/Gal	7.104	7.184	7.176	7.113	7.001	7.007
TBN	11	11	11	11	11	11
Sulfated Ash, % wt	<1	<1	<1	<1	<1	<1

NOTE: Check for availability of all grades in all market areas.



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