



X/C® Aviation Oil

Phillips 66 X/C® Aviation Oil is an ashless dispersant, multigrade engine oil specifically formulated for year-round use in aircraft piston engines. It provides distinct performance benefits compared to single-grade engine oils, including easier starting and faster oil circulation at low temperatures, reduced warm-up time and reduced oil consumption in most engines. It maintains its film strength under high loads and at high temperatures to protect against wear and piston scuffing. The ashless dispersant formulation helps minimize the formation of engine sludge, varnish, piston deposits and combustion chamber deposits. This results in a much cleaner engine compared to the use of straight mineral oils.

X/C® Aviation Oil was the first FAA-approved mineral oil-based, ashless dispersant, multiviscosity aviation engine oil. It has provided outstanding, proven performance in a wide variety of aviation uses since its introduction in 1979, including flight schools, charter and cargo airlines, acrobatic aircraft, spray planes, race planes and virtually any other general aviation application. It is available throughout the United States and is exported to other countries around the world.

Applications

X/C® Aviation Oil SAE 20W-50 is recommended for use in opposed piston engines. It replaces U.S. Military single grades 65, 80 and 100 with no sacrifice in performance. It is recommended for use during break-in and then as the operational oil until TBO.

X/C® Aviation Oil SAE 25W-60 is recommended for use in radial piston engines and in other aviation piston engines originally designed to run on heavier-grade oils, such as U.S. Military grade 120. It is recommended for use during break-in and then as the operational oil until TBO.

X/C® Aviation Oil meets the requirements of:

- Avco Lycoming Material Specification No. 301G
- Pratt & Whitney Bulletin No. 1183 "U"
- SAE Standard J1899
- Teledyne Continental Material Specification MHS-24B
- U.S. Military Specification MIL-L-22851D for additive treatment

QPL Approval Numbers: D07L1-20W-50 and D07L1-25W-60

**Ashless
Dispersant,
Multigrade
Engine Oil For
Aircraft Piston
Engines**

Contact Information

**U.S. Customer
Service:
1-800-822-6457**

**Technical Support:
1-800-766-0050**

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Features/Benefits

- Ashless dispersant helps minimize engine sludge and varnish deposits for a cleaner engine
- Easier starting and faster oil circulation at low temperatures compared to single-grade oils
- Reduced warm-up time and cooler operating temperatures compared to single-grade oils
- High-film strength for protection against wear and piston scuffing, even under high-load conditions, such as takeoff and at elevated operating temperatures
- Provides cleaner and quicker break-in than traditional all-mineral, non-additized, single-grade oils
- Protects against rust and corrosion
- Reduces oil consumption in most engines
- Suitable for year-round use

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Typical Properties

SAE Grade	20W-50	25W-60
Gravity, °API	30.1	28.8
Density, g/cm ³ @ 15.6°C (60°F)	0.876	0.883
Color, ASTM D1500	2.5	4.0
Flash Point (COC), °C (°F)	235 (455)	253 (487)
Pour Point, °C (°F)	-33 (-27)	-27 (-17)
Viscosity,		
cSt @ 40°C	159	245
cSt @ 100°C	19.8	24.8
Viscosity Index	144	128
Cold Cranking Viscosity, cP	5,200	8,200
@ °C	-15	-10
Acid Number, ASTM D664, mg KOH/g	0.15	1.15
Ash Content, SAE J1787, wt %	Nil	Nil
Copper Corrosion, ASTM D130	Pass	Pass
Foam Test, ASTM D892	Pass	Pass

Health and Safety Information

For recommendations on safe handling and use of this product, please refer to the Material Safety Data Sheet via <http://w3.conocophillips.com/NetMSDS>.

Due to continual product research and development, the information contained herein is subject to change without notification.

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