X/C® Aviation Oil

Ashless Dispersant, Multi-Grade Engine Oil for Aircraft Piston Engines

Phillips 66® X/C Aviation Oil is an ashless dispersant, multi-grade engine oil specially formulated for year-round use in aircraft piston engines. It provides distinct performance benefits compared with 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, resulting in a much cleaner engine compared with the use of straight (non-dispersant) mineral oils.

X/C Aviation Oil was the first FAA-approved mineral oil-based, ashless dispersant, multi-viscosity aviation engine oil. It has more than 30 years of outstanding, proven performance in a wide variety of aviation uses, 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 20W-50 Aviation Oil is recommended for use in opposed piston engines. It can replace Commercial Grade 65, 80 or 100 single-grade engine oils with no sacrifice in performance.

X/C 25W-60 Aviation Oil is recommended for use in radial piston engines and in other aviation piston engines originally designed to run on heavier-grade oils, such as Commercial Grade 120.

Both viscosity grades are 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 Service Bulletin No. 1183 Rev. U
- SAE Standard J1899
- Teledyne Continental Material Specification MHS-24B
- U.S. Military Specification MIL-L-22851D (obsolete) for additive treatment QPL Approval Numbers: D07L1-20W-50 (X/C 20W-50), D07L1-25W-60 (X/C 25W-60) X/C® Aviation Oil

KEEPING THE WORLD RUNNING SMOOTHLY

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 with single-grade oils
- Reduced warm-up time and cooler operating temperatures compared with 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

X/C® Aviation Oil

Typical Properties		
SAE Grade	**20W-50**	**25W-60**
Gravity, °API	30.1	28.8
Specific Gravity @ 60°F	0.876	0.883
Density, lbs/gal @ 60°F	7.29	7.35
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, Kinematic		
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	0.15
Ash Content, SAE J1787, wt %	Nil	Nil
Copper Corrosion, ASTM D130	Pass	Pass
Foam Test, ASTM D892	Pass	Pass

Health & Safety Information

For recommendations on safe handling and use of this product, please refer to the Safety Data Sheet via http://www.phillips66.com/EN/products/Pages/MSDS.aspx.

07-13-16