



Victory® AW 20W-50 Aviation Oil

Phillips 66® Victory AW 20W-50 Oil is an ashless dispersant, multi-grade engine oil specially formulated for year-round use in aircraft piston engines. Victory AW 20W-50 is pre-blended with the proper concentration of antiscuff/antiwear additive (LW-16702) mandated by Lycoming Service Bulletins 446E and 471B and Service Instruction 1409C. 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.

Applications

Victory AW 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.

Victory AW 20W-50 Oil meets the requirements of:

- Avco Lycoming Service Instruction 1014
- 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:

Features/Benefits

- Ashless dispersant helps minimize engine sludge and varnish deposits for a cleaner engine
- Pre-blended with Lycoming-approved antiwear additive
- 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
- Protects against rust and corrosion
- Reduces oil consumption in most engines
- Suitable for year-round use

**Ashless
Dispersant,
Multi-grade
Engine Oil
With Antiwear
Additive For
Aircraft Piston
Engines**

KEEPING THE
WORLD
RUNNING
SMOOTHLY. 



Victory® AW 20W-50 Aviation Oil

Typical Properties	
SAE Grade	20W-50
Gravity, °API	30.1
Specific Gravity @ 60°F	0.876
Density, lbs/gal @ 60°F	7.29
Color, ASTM D1500	2.5
Flash Point (COC), °C (°F)	235 (455)
Pour Point, °C (°F)	-33 (-27)
Viscosity, Kinematic	
cSt @ 40°C	159
cSt @ 100°C	19.8
Viscosity Index	144
Cold Cranking Viscosity, cP	5,200
@ (°C)	(-15)
Acid Number, ASTM D664, mg KOH/g	0.15
Ash Content, SAE J1787, wt%	Nil
Copper Corrosion, ASTM D130	Pass
Foam Test, ASTM D892	Pass

Health Safety Information

For recommendations on safe handling and use of this product, please refer to the Material Safety Data Sheet via <http://www.phillips66.com/SDS>.

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Typical properties are average values only and do not constitute a specification. Minor variations that do not affect product performance are to be expected during normal manufacture, and at different blending locations. Product formulations are subject to change without notification.

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