Aviation Oil

Non Dispersant Oil for Aircraft Piston Engines

AVIATION OIL is the name of two grades of non-dispersant mineral oil-based lubricants for piston engines of commercial, military, and private aircraft. They contain very low concentrations of anti-oxidant, anti-foam, and pour point depressant. High manufacturing standards ensure the dependability of AVIATION OIL under the exacting conditions of modern piston engine service. They are approved by leading engine manufacturers throughout the world.

AVIATION OIL has earned a reputation for inherent high-temperature stability and clean operation, which has made it the first choice for many leading military and commercial engines. These properties – in addition to its high viscosity index, low pour point, non-corrosive nature, and other quality features – are maintained by precise refinery controls.

Features and Advantages

- Non-dispersant mineral oil-based lubricants for aircraft piston engines
- Meets SAE J1966
- All grades approved against MIL-L-6082E/J1966
- Appropriate viscosity grades approved for Pratt & Whitney (Spec No. 1183), Teledyne Continental Motors (MHS-24), Textron Lycoming (Spec No. 301F) engines

Applications

Despite the advent and wide-spread use of ashless dispersant aviation engine oils, many operators prefer to continue the use of non-dispersant mineral oils lubricants, which have provided excellent service for many years. In addition, many engine builders and overhaul agencies recommend or require the use of non-dispersants oils for break-in of new or newly overhauled engines. The two grades of AVIATION OIL meet these needs in accordance with the requirements of all major engine manufacturers.

Typical Characteristics*

Aviation Oil Grade	**100**	**120**
SAE Grade	50	60
Military Grade	1100	1120
Gravity, ˚API	27.2	26.5
Specific Gravity at 15.6˚C (60˚F)	0.892	0.896
Viscosity, Kinematic		
cSt at 40˚C	224	317
cSt at 100˚C	19.8	24.6
Viscosity Index	98	98
Flash Point, ˚C (˚F)	264 (507)	275 (527)
Pour point, ˚C (˚F)	-15 (5)	-12 (10)
Ash mass %	nil	nil
Acid no., mg KOH/g	0.03	0.03
Sulfur, mass %	0.55	0.65

* Physical properties are listed in the table. Values not identified as maximum or minimum are typical and may vary within modest ranges.

Approvals

Both grades of AVIATION OIL meet the requirements and are approved against U.S. Military specification MIL-L-6082E and SAE J1966, which replaced it. They also meet the requirements of Pratt & Whitney Aircraft Specification PWA 1183T.

Health and Safety

Based on available toxicological information, it has been determined that this product poses no significant health risk when used and handled properly. Information on use and handling, as well as health and safety information, can be found in the Material Safety Data Sheet which can be obtained from your local distributor; via the Internet on http://www.exxonmobil.com; or by calling 1-800-662-4525 and selecting prompt 2.

For additional technical information or to identify the nearest U.S. ExxonMobil supply source, call 1-800-662-4525

Exxon Mobil Corporation
3225 Gallows Road, Fairfax, Virginia 22037-0001