ExxonMobil

ExxonMobil Avgas

ExxonMobil Commercial Fuel , United States

Product Description

ExxonMobil Aviation Gasoline is leaded fuel satisfying the requirements of ASTM D910, Standard Specification for Aviation Gasolines and DEF STAN 91-090 (DERD 2485). Critical properties must be controlled within defined limits for Aviation Gasoline to comply with ASTM D910 and DEF STAN 91-90 (DERD 2485) specifications.

ExxonMobil supplies one grade of Aviation Gasoline:

Aviation Gasoline 100LL (dyed blue) is a lower lead version of Aviation Gasoline 100 (0.56g lead /litre Max). It is excellent for use in piston engine powered private, commercial and military training aircraft. Aviation Gasoline 100LL has been approved by the major aircraft engine manufacturers for use in aircraft engines originally designed for operation on the following grades: 80/87, 100/130, and the discontinued 91/98. This grade is generally available in most regions worldwide.

Note that properties critical to aviation use (for example, vapour pressure and cleanliness) are not controlled to the same degree in automotive motor gasoline manufacture and handling. ExxonMobil Aviation does not support or approve the use of Automotive Gasoline as aircraft fuel.

Specifications

ExxonMobil Avgas 100LL meets the following industry specifications:	Avgas 100LL
ASTM D910	X
DEF STAN 91-090	X

Product Properties

	Avgas 100LL
Motor Method Octane	99.6 Min.
Supercharge Rating Performance No.	130.0 Min.
Tetraethyl Lead, mL/L	0.27 Min. / 0.53 Max.
Colour	Blue
10% Distillation, ºC	75 Max.
40% Distillation, ºC	75 Min.
50% Distillation, ºC	105 Max.
90% Distillation, ºC	135 Max.
Final Boiling Point, ºC	170 Max.
Sum of 10% and 50%, ºC	135 Min.
Recovery Volume, %	97 Min.
Residue Volume, %	1.5 Max.
Loss Volume, %	1.5 Max.

	Avgas 100LL
Vapour Pressure, kPa	38.0 Min. / 49.0 Max.
Freezing Point, ºC	-58 Max.
Sulphur, Wt. %	0.05 Max.
Net Heat of Combustion, MJ/kg	43.50 Min.
Copper Strip Corrosion, 2 h @ 100 ºC	No. 1 Max.
Oxidation Stability (5 h aging for ASTM D910, 16 h aging for DefStan 91-090)	
Potential gum, mg/100 mL	6 Max.
Lead Precipitate, mg/100 mL (ASTM D910 / DefStan 91-090)	3 Max. / 2 Max.
Water Reaction, Volume Change, mL	±2 Max.
Electrical Conductivity, pS/m *Limits apply when conductivity improver is used	50 Min. 600 Max.*

Health and Safety

Health and Safety recommendations for this product can be found on the Material Safety Data Sheet (MSDS) @ http://www.msds.exxonmobil.com/psims/psims.aspx

MAIN HAZARD: FIRE

Keep away from ignition sources.

Discharge your static electricity before fueling.

Fill portable containers on the ground.

Handle/Transport in closed or properly vented containers and systems, consistent with all applicable laws.

Harmful or fatal if swallowed.

Avoid breathing the vapors and skin contact.

Do not wash down spills with water. Prevent all spills from reaching water.

All trademarks used herein are trademarks or registered trademarks of Exxon Mobil Corporation or one of its subsidiaries unless indicated otherwise.

07-2022
Exxon Mobil Corporation
22777 Springwoods Village Parkway
Spring TX 77389

800 662-4592

Due to continual product research and development, the information contained herein is subject to change without notification. Typical properties may vary slightly.

ExxonMobil

Exxon Mobil Esso

© Copyright 2003-2026 Exxon Mobil Corporation. All

Rights Reserved