



ExxonMobil Avgas

Product Description

ExxonMobil Aviation Gasolines are leaded fuels satisfying the requirements of ASTM D910, Standard Specification for Aviation Gasolines and DEF STAN 91-90 (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 two grades of Aviation Gasoline: Aviation Gasoline 100 (dyed green) is excellent for use in piston engine powered private planes, most commercial aircraft, and combat-type planes during military training procedures. This grade is available in a number of regions internationally.

Aviation Gasoline 100LL (dyed blue) is a lower lead version of Aviation Gasoline 100 (0.56g lead /litre Max). It is also 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 100 and Avgas 100LL meet the following industry specifications:	Avgas 100	Avgas 100LL
ASTM D 910	X	X
DEF STAN 91-90 (DERD 2485)	X	X

Product Properties

	Avgas 100	Avgas 100LL
Motor Method Octane	99.6 Min.	99.6 Min.
Supercharge Rating Performance No.	130.0 Min.	130.0 Min.
Tetraethyl Lead, mL/L	1.06 Max.	0.53 Max.
Colour	Green	Blue
10% Distillation, % at °C	75 Max.	75 Max.
40% Distillation, % at °C	75 Min.	75 Min.
50% Distillation, % at °C	105 Max.	105 Max.
90% Distillation, % at °C	135 Max.	135 Max.
Final Boiling Point, °C	170 Max.	170 Max.
Sum of 10% and 50%, °C	135 Min.	135 Min.
Recovery Volume, %	97 Min.	97 Min.
Residue Volume, %	1.5 Max.	1.5 Max.
Loss Volume, %	1.5 Max.	1.5 Max.
Vapour Pressure, kPa	38.0/49.0	38.0/49.0
Freezing Point, °C	-58 Max.	-58 Max.
Sulphur, Wt. %	0.05 Max.	0.05 Max.
Net Heat of Combustion, MJ/kg	43.5 Min.	43.5 Min.
Copper Strip Corrosion, 2 h @ 100 °C	No. 1 Max.	No. 1 Max.

Oxidation Stability (5 h aging)

Oxidation Stability (Shedding)

Potential gum, mg/100 mL	6 Max.	6 Max.
Lead Precipitate, mg/100 mL	3 Max.	3 Max.
Water Reaction, Volume Change, mL	±2 Max.	±2 Max.
Electrical Conductivity, pS/m	450 Max.	450 Max.

Health and Safety

Based on available information, this product is not expected to produce adverse effects on health when used for the intended application and the recommendations provided in the Material Safety Data Sheet (MSDS) are followed. MSDSs are available via the Internet at ExxonMobil.com. This product should not be used for purposes other than its intended use.

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.

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10-2010

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

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