



## 2008-04 - Risk of Using Automotive Fuels in Aircraft

June 2008 – Author: Linda Gallaher

It has come to our attention that in response to increased costs and environmental contamination issues, some aircraft owners are or are considering fueling their aircrafts with unleaded gasoline that is intended for ground or other vehicle use.

Chevron believes there is a significant flight safety risk associated with fueling aircraft using any fuel that does not meet government and industry approved aviation specifications and guidelines. This includes unleaded fuels intended for ground vehicles, even if such fuel is used in aircraft that has been deemed compatible with unleaded ground fuel (gasoline).

While there are a number of reasons supporting our position, the following are a few examples of why we believe the use of non-aviation fuel in aircraft is unsafe:

- The production and handling of aviation fuel **follow much stricter guidelines** than ground and other fuels. This is necessary due to the heightened safety concerns of airborne vessels.
- Unlike aviation fuels, ground and other fuels do not require **complete segregation and/or isolation** from other fuel streams. Without such isolation and segregation, there is an increased risk of fuel-related engine failure during flight.
- **Ethanol**, which is being introduced into more ground and other fuels, has a variety of characteristics which make it unsuitable for use in many aircrafts. The introduction of ethanol into an aircrafts fuel system can lead to a dangerous or degraded engine and airframe performance. Within a few years, most of the gasoline supplied in United States is expected to contain up to 10% ethanol. This may not be apparent to purchasers of gasoline as some states have no current disclosure requirements to label or otherwise identify the ethanol content in gasoline at the pumps.

Chevron will continue to research and develop more cost effective alternatives to leaded aviation gasoline. However, in the meantime aircraft owners should not fuel from non-aviation fuel pumps and dispensers. Doing so places both themselves and the communities over which they fly at risk.

If you have questions or comments, please contact:

Linda Gallaher  
Product Quality Manager  
Chevron Global Aviation  
Houston, TX USA  
[LIMG@chevron.com](mailto:LIMG@chevron.com)

+1 832-854-2779

Advice and opinion noted herein are given in good faith and on the basis of the best information available, but no legal liability therefore is accepted by Chevron Global Aviation or any of its affiliates. The use of such terms as "Company", "Chevron", "Texaco", "Caltex", "organization", "it's", "our", "we", and "us" when referring to subsidiaries and affiliates is only for convenience, and not intended as an accurate description of corporate relations.

Global Aviation

