



U.S. Department
of Transportation
**Federal Aviation
Administration**

Memorandum

Subject: INFORMATION: Approval of Ethyl-Tertiary-Butyl-Ether (ETBE) Oxygenate Additive for use in Autogas Supplemental Type Certificates (STCs)

Date: DEC _1 1995

From: Manager, Small Airplane Directorate, ACE-100
Manager, Engine and Propeller Directorate, ANE-100

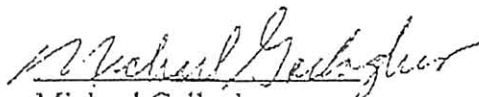
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To: See Distribution

Methyl-Tertiary-Butyl-Ether (MTBE) oxygenate additive was approved for use in aircraft with autogas STCs on December 14, 1992. Advisory Circular (AC) 23.1521-1B was subsequently issued on March 2, 1995, permitting the use of MTBE additive. MTBE is used as a blending agent by the oil companies to increase the antiknock index of gasoline, and to meet Environmental Protection Agency (EPA) standards.

Ethyl-Tertiary-Butyl-Ether (ETBE) oxygenate additive is also being used by the oil companies to increase the antiknock index of gasoline and to meet EPA standards. Research tests, conducted at the FAA Technical Center, with autogas blended with ETBE have not shown any safety related problems. Material compatibility and performance data supplied by the Experimental Aircraft Association and Petersen Aviation, the main holders of autogas STCs, also have not shown any safety related problems with autogas blended with ETBE. FAA service difficulty reports do not reveal any material compatibility or safety issues with ETBE additive. Accordingly, the FAA has determined that autogas blended with ETBE can be used safely in aircraft.

Autogas blended with ETBE is approved for use in aircraft that are approved for the use of autogas by STCs.


Michael Gallagher


Jay J. Pardee

10/23/95
Date

11/21/95
Date