



Designation: D 5006 – 02³

An American National Standard

Standard Test Method for Measurement of Fuel System Icing Inhibitors (Ether Type) in Aviation Fuels¹

This standard is issued under the fixed designation D 5006; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope

1.1 This test method covers a technique for measuring the concentration of Diethylene Glycol Monomethyl Ether (DiEGME) in aviation fuels. The HB and Brix scale refractometers are specified to determine the concentration of this fuel system icing inhibitor (FSII) by measuring the refractive index of a water extract. Precision estimates have been determined for the DiEGME additives using specific extraction ratios with a wide variety of fuel types. The extraction ratios are high enough that portable handheld refractometers can be used, but not so high as to sacrifice accuracy or linearity, or both, in the 0.01 to 0.25 vol % range of interest.

1.2 DiEGME is fully described in Specification D 4171 and in other specifications.

1.3 The values stated in SI units are to be regarded as the standard.

1.34 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

¹ This test method is under the jurisdiction of ASTM Committee D02 on Petroleum Products and Lubricants and is the direct responsibility of Subcommittee D02.J0 on Aviation Fuels.

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