



Designation: D 5188 – 04a

An American National Standard

Standard Test Method for Vapor-Liquid Ratio Temperature Determination of Fuels (Evacuated Chamber Method)¹

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1. Scope*

1.1 This test method covers the determination of the temperature at which the vapor formed from a selected volume of volatile petroleum product saturated with air at 0 to 1°C (32 to 34°F) produces a pressure of one atmosphere in an evacuated chamber of fixed volume. This test method is applicable to samples for which the determined temperature is between 36 and 80°C (97 and 176°F) and the vapor-liquid ratio is between 8 to 1 and 75 to 1.

NOTE 1—When the vapor-liquid ratio is 20:1, the result is intended to be comparable to the results determined by Test Method D 2533.

NOTE 2—This test method may also be applicable at pressures other than one atmosphere, but the stated precision may not apply.

1.2 This test method is applicable to both gasoline and gasoline-oxygenate blends.

1.2.1 Some gasoline-oxygenate blends may show a haze when cooled to 0 to 1°C. If a haze is observed in 11.5, it shall be indicated in the reporting of results. The precision and bias statements for hazy samples have not been determined (see Note 9).

1.3 The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

1.4 *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.* For specific warnings, see 7.2 and 8.1.1.

¹ This test method is under the jurisdiction of ASTM Committee D02 on Petroleum Products and Lubricants and is the direct responsibility of Subcommittee D02.08 on Volatility.

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