



Designation: D2068 – 20

Standard Test Method for Determining Filter Blocking Tendency¹

This standard is issued under the fixed designation D2068; 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.

INTRODUCTION

This test method describes three procedures using different filter media. The result of any test is dependent on the filter mandated in the procedure. If a specification requires a specific D2068 procedure, do not substitute a different procedure or filter without agreement from the specifier.

1. Scope*

1.1 This test method covers three procedures for the determination of the filter blocking tendency (FBT) and filterability of middle distillate fuel oils and liquid fuels such as biodiesel and biodiesel blends. The three procedures and associated filter types are applicable to fuels within the viscosity range of 1.3 mm² to 6.0 mm²/s at 40 °C.

NOTE 1—ASTM specification fuels falling within the scope of this test method are: Specification [D396](#) Grades No 1 and 2; Specification [D975](#) Grades 1-D, low sulfur 1-D and 2-D; Specification [D2880](#) Grades 1-GT and 2-GT; Specification [D6751](#).

1.2 This test method is not applicable to fuels that contain free (undissolved) water (see [7.3](#)).

1.3 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.5 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 ASTM Standards:²

[D396](#) Specification for Fuel Oils

[D975](#) Specification for Diesel Fuel

[D2880](#) Specification for Gas Turbine Fuel Oils

[D4057](#) Practice for Manual Sampling of Petroleum and Petroleum Products

[D4176](#) Test Method for Free Water and Particulate Contamination in Distillate Fuels (Visual Inspection Procedures)

[D4177](#) Practice for Automatic Sampling of Petroleum and Petroleum Products

[D4860](#) Test Method for Free Water and Particulate Contamination in Middle Distillate Fuels (Clear and Bright Numerical Rating)

[D6300](#) Practice for Determination of Precision and Bias Data for Use in Test Methods for Petroleum Products, Liquid Fuels, and Lubricants

[D6426](#) Test Method for Determining Filterability of Middle Distillate Fuel Oils

[D6708](#) Practice for Statistical Assessment and Improvement of Expected Agreement Between Two Test Methods that Purport to Measure the Same Property of a Material

[D6751](#) Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels

2.2 ISO Standard:³

[ISO 5636-5](#) Paper and Board—Determination of Air Permeance and Air Resistance (Medium Range) Part 5 Gurley Method

¹ This test method is under the jurisdiction of ASTM Committee [D02](#) on Petroleum Products, Liquid Fuels, and Lubricants and is the direct responsibility of Subcommittee [D02.14](#) on Stability, Cleanliness and Compatibility of Liquid Fuels.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036, <http://www.ansi.org>.

*A Summary of Changes section appears at the end of this standard