



Designation: D8386 – 21

Standard Test Method for Determining Enhanced Filter Blocking Tendency (EFTB)¹

This standard is issued under the fixed designation D8386; 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 is based on Test Method **D2068** and uses a filter media which is more sensitive to blocking by contaminants in fuels than the filter specified in Test Method **D2068** Procedure A and B. The result of this test method is dependent on the mandated filter material, as well as the procedural steps of this method. If a specification requires a specific Dxxxx procedure, do not substitute a different procedure or filter without agreement from the specifier.

1. Scope

1.1 This test method covers a procedure for the determination of the Enhanced Filter Blocking Tendency (EFTB) and the filterability of middle distillate fuel oils. This test is applicable to fuels within the viscosity range of 1.3 mm²/s 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 No. 1-D S15 and S500, and No. 2-D S15 and S500; Specification **D2880** Grades No. 1-GT and No. 2-GT.

1.2 This test method has interim repeatability only. For more information, see Section 12.

1.3 This test method is not applicable to fuels that contain free (undissolved) water (see 7.3).

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

1.5 *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.*

1.6 *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

D2068 Test Method for Determining Filter Blocking Tendency

D2880 Specification for Gas Turbine Fuel Oils

D4057 Practice for Manual Sampling of Petroleum and Petroleum Products

D4175 Terminology Relating to Petroleum Products, Liquid Fuels, and Lubricants

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

2.2 *ASTM Manuals:*³

ASTM MNL 1

2.3 *ASTM Adjuncts:*

D2PP, Determination of Precision and Bias Data for Use in Test Methods for Petroleum Products⁴

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.

Current edition approved April 1, 2021. Published May 2021. DOI: 10.1520/D8386-21.

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 MNL 1, *Manual on Significance of Tests for Petroleum Products*, 9th Edition, ASTM International, West Conshohocken, 2018.

⁴ This adjunct has been withdrawn and is no longer available.