



Designation: D 613 – 03ab

An American National Standard

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Standard Test Method for Cetane Number of Diesel Fuel Oil¹

This standard is issued under the fixed designation D 613; 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.

1. Scope*

1.1 This test method determines the rating of diesel fuel oil in terms of an arbitrary scale of cetane numbers using a standard single cylinder, four-stroke cycle, variable compression ratio, indirect injected diesel engine.

1.2 The cetane number scale covers the range from zero (0) to 100 but typical testing is in the range of 30 to 65 cetane number.

1.3 The values for operating conditions are stated in SI units and are considered standard. The values in parentheses are the historical inch-pounds units. In addition, the engine measurements continue to be in inch-pounds units because of the extensive and expensive tooling that has been created for these units.

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 more specific warning statements, see Annex A1.

2. Referenced Documents

2.1 ASTM Standards:

D 975 Specification for Diesel Fuel Oils²

¹ This test method is under the jurisdiction of ASTM Committee D02 on Petroleum Products and Lubricants and is the direct responsibility of Subcommittee D02.01 on Combustion Characteristics.

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