



Standard Terminology Relating to Petroleum, Petroleum Products, and Lubricants¹

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

^{ε1} NOTE—Terms were transferred editorially in August 2010.

1. Scope*

1.1 This terminology standard covers the compilation of terminology developed by Committee D02 on Petroleum Products and Lubricants, except that it does not include terms/definitions specific only to the standards in which they appear.

1.1.1 The terminology, mostly definitions, is unique to petroleum, petroleum products, lubricants, and certain products from biomass and chemical synthesis. Meanings of the same terms outside of applications to petroleum, petroleum products, and lubricants can be found in other compilations and in dictionaries of general usage.

1.1.2 The terms/definitions exist in two places: (1) in the standards in which they appear and (2) in this compilation.

2. Terminology

2.1 Alphabetical listing of terms with definitions for each term showing attributions as to source and subcommittee jurisdiction is in bold print following the definition. Those showing no attributes are under the jurisdiction of Subcommittee CS 95. Some abbreviations, acronyms and symbols are included in the list.

3-MPA, n —3-methylphenylamine [D02.J0] D6812

abrasion, n —wear by displacement of material caused by hard particles or hard protuberances. [D02.B0] D4998

abrasive wear—wear due to hard particles or hard protuberances forced against and moving along a solid surface. [D02.L0] D5182

absolute filtration rating, n —the diameter of the largest hard spherical particle that will pass through a filter under specified test conditions. This is an indication of the largest opening in the filter element. [D02.N0] D4174

absorbance, A , n —the molecular property of a substance that determines its ability to take up radiant power, expressed by:

$$A = \log_{10} (1/T) = -\log_{10} T$$

where T is the transmittance.

DISCUSSION—Absorbance expresses the excess absorption over that of a specified reference or standard. It is implied that compensation has been affected for reflectance losses, solvent absorption losses, and refractive effects, if present, and that attenuation by scattering is small compared with attenuation by absorption. [D02.04] D2008

absorptivity, a , n —the specific property of a substance to absorb radiant power per unit sample concentration and path length, expressed by:

$$a = Af/bc$$

where:

A = the absorbance,

f = the dilution factor,

b = sample cell path length, and

c = the quantity of absorbing substance contained in a volume of solvent.

[D02.04] D2008

acceptance limit (AL), n —a numerical value that defines the point between acceptable and unacceptable quality.

DISCUSSION—The AL is not necessarily the specification limit. It is the value that takes into account the specification value, the test method precision, and the confidence level desired for defining minimum acceptable quality relative to the specification value. [D02.94] D3244

accepted reference value, n —a value that serves as an agreed-upon reference for comparison and that is derived as (1) a theoretical or established value, based on scientific principles, (2) an assigned value, based on experimental work of some national or international organization, such as the U.S. National Institute of Standards and Technology (NIST), or (3) a consensus value, based on collaborative experimental work under the auspices of a scientific or engineering group. [D02.01] D6890, [D02.94] D6299, D6792, [E11] E456, E177

DISCUSSION—In the context of this test method, accepted reference value is understood to apply to the Research octane number of specific reference materials determined empirically under reproducibility conditions by the National Exchange Group or another recognized exchange testing organization. [D02.01] D2699, D2700

¹ This terminology is under the jurisdiction of ASTM Committee D02 on Petroleum Products and Lubricants and is the direct responsibility of Subcommittee D02.95 on Terminology.

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