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An American National Standard

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Standard Test Method for Ash from Petroleum Products¹

This standard is issued under the fixed designation D 482; 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.

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

1. Scope*

1.1 This test method covers the determination of ash in the range 0.001–0.180 mass %, from distillate and residual fuels, gas turbine fuels, crude oils, lubricating oils, waxes, and other petroleum products, in which any ash-forming materials present are normally considered to be undesirable impurities or contaminants (Note 1). The test method is limited to petroleum products which are free from added ash-forming additives, including certain phosphorus compounds (Note 2).

NOTE 1—In certain types of samples, all of the ash-forming metals are not retained quantitatively in the ash. This is particularly true of distillate oils, which require a special ash procedure in order to retain metals quantitatively.

NOTE 2—This test method is not intended for the analysis of unused lubricating oils containing additives; for such samples use Test Method D 874. Neither is it intended for the analysis of lubricating oils containing lead nor for used engine crankcase oils.

1.2 SI units are regarded as the standard. The preferred expression of the property is mass %.

1.3 *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.*

2. Referenced Documents

2.1 ASTM Standards:

D 874 Test Method for Sulfated Ash from Lubricating Oils and Additives²

¹ This test method is under the jurisdiction of ASTM Committee D02 on Petroleum Products and Lubricants and is the direct responsibility of Subcommittee D02.03 on Elemental Analysis.

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In the IP, this test method is under the jurisdiction of the Standardization Committee. This test method was adopted as a joint ASTM-IP standard in 1965.