



Designation: E 1868 – 9702

Standard Test Method for Loss-On-Drying by Thermogravimetry¹

This standard is issued under the fixed designation E 1868; 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 covers a procedure for determining the amount of volatile matter of any kind that is driven off from a test specimen under a specific set of temperature and time conditions. This test method determines only the mass of material lost, not its identity.

1.2 This test method is applicable to a wide variety of solid or liquid materials, mixtures or blends where the major component is stable at the test temperature.

1.3 The applicable temperature range for this test method is generally between ambient temperature and 1000°C.

1.4 Electronic instrumentation or automated data analysis and data reduction systems or treatments equivalent to this method may be used.

NOTE 1—Users are expressly advised that all such instruments or techniques may not be equivalent. It is the responsibility of the user to determine the necessary equivalency prior to use.

~~1.5 The values stated in SI~~

~~1.5 SI units are to be regarded as the standard.~~

~~1.6 There is no ISO standard equivalent to this test method.~~

~~1.7 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 6 Test Method for Loss on Heating of Oil and Asphaltic Compounds²

D 1509 Test Method for Carbon Black—Heating Loss³

D 2216 Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock⁴

D 2288 Test Method for Weight Loss of Plasticizers on Heating⁵

D 2595 Test Method for Evaporation Loss of Lubricating Greases Over Wide-Temperature Range⁶

D 2832 Guide for Determining Volatile and Nonvolatile Content of Paint and Related Coatings⁷

D 3175 Test Method for Moisture in the Analysis Sample of Coal and Coke⁸

D 4893 Test Method for Determination of Pitch Volatility⁹

E 359 Test Method for Chemical Analysis of Soda Ash (Sodium Carbonate)¹⁰

E 473 Terminology Relating to Thermal Analysis¹¹

E 897 Test Method for Volatile Matter in the Analysis Sample of Refuse-Derived Fuel¹²

E 1131 Test Method for Compositional Analysis by Thermogravimetry¹¹

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² Annual Book of ASTM Standards, Vol 04.04.

³ Annual Book of ASTM Standards, Vol 09.01.

⁴ Annual Book of ASTM Standards, Vol 04.08.

⁵ Annual Book of ASTM Standards, Vol 08.01.

⁶ Annual Book of ASTM Standards, Vol 05.01.

⁷ Annual Book of ASTM Standards, Vol 06.01.

⁸ Annual Book of ASTM Standards, Vol ~~05.05; 05.06~~

⁹ Annual Book of ASTM Standards, Vol ~~15.05; 05.02~~

¹⁰ Annual Book of ASTM Standards, Vol ~~14.02; 15.05~~

¹¹ Annual Book of ASTM Standards, Vol ~~11.04; 14.02~~

¹² ~~Formulary~~

¹² Annual Book of ASTM Standards, Vol XVII, United States Pharmacopoeia Convention, 12601 Twinbrook Parkway, Rockville, MD 20852; 11.04.