



Designation: D 5048 – 9703

Standard Test Method for Measuring the Comparative Burning Characteristics and Resistance to Burn-Through of Solid Plastics Using a 125-mm Flame¹

This standard is issued under the fixed designation D 5048; 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 fire-test-response test method covers a small-scale laboratory procedure for determining the relative burning characteristics and the resistance to burn-through of plastics using small bar and plaque specimens exposed to a 125-mm (500-W nominal) flame.

NOTE 1—This test method, IEC/CDV 60695-11-20, method and ISO 10351 IEC 60695-11-20 are technically equivalent.

NOTE 2—For additional information on comparative burning characteristics of solid plastics in a vertical position, see Test Method D 3801.

1.2 This test method was developed for polymeric materials used for parts in devices and appliances. The results are intended to serve as a preliminary indication of their acceptability with respect to flammability for a particular application. The final acceptance of the material is dependent upon its use in complete equipment that conforms with the standards applicable to such equipment.

1.3 The classification system described in Appendix X1 is intended for quality assurance and the preselection of component materials for products.

1.4 This test method may be applied to other nonmetallic materials if found to be appropriate.

1.5 This test method is not intended to cover plastics when used as materials for building construction or finishing.

1.6 *This standard should be used to measure and describe the response of materials, products, or assemblies to heat and flame under controlled laboratory conditions and should not be used to describe by itself incorporate all factors required for fire hazards or appraise the fire-hazard or fire-risk fire risk assessment of materials, products, or assemblies under actual fire conditions. However, results of this test may be used as elements of a fire-hazard assessment or a fire-risk assessment which takes into account all of the factors which are pertinent to an assessment of the fire-hazard or fire-risk of a particular end use conditions.*

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. See 6.1.4 for a specific hazard statement.*

2. Referenced Documents

2.1 ASTM Standards:

¹ This test method is under the jurisdiction of ASTM Committee D20 on Plastics and is the direct responsibility of Subcommittee D20.30 on Thermal Properties .
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