



Designation: D3575 – 20

Standard Test Methods for Flexible Cellular Materials Made from Olefin Polymers¹

This standard is issued under the fixed designation D3575; 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 These test methods apply to flexible closed cell materials made from olefin polymers or blends of olefin polymers with other polymers as defined in Section 3.

1.2 These test methods cover test procedures only. Product requirements are outlined in Specification D4819.

1.3 Unless specifically stated otherwise, by agreement between the purchaser and supplier, all tests shall be performed in accordance with the test methods specified in this standard.

1.4 The values stated in SI units are to be regarded as the standard.

1.5 *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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

NOTE 1—This standard and ISO 7214 address the same subject matter, but differ in technical content.

1.6 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*²

C177 Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded-Hot-Plate Apparatus

C518 Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus

¹ These test methods are under the jurisdiction of ASTM Committee D20 on Plastics and are the direct responsibility of Subcommittee D20.22 on Cellular Materials - Plastics and Elastomers.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

D412 Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension

D624 Test Method for Tear Strength of Conventional Vulcanized Rubber and Thermoplastic Elastomers

D883 Terminology Relating to Plastics

D1056 Specification for Flexible Cellular Materials—Sponge or Expanded Rubber

D1349 Practice for Rubber—Standard Conditions for Testing

D1596 Test Method for Dynamic Shock Cushioning Characteristics of Packaging Material

D1667 Specification for Flexible Cellular Materials—Poly (Vinyl Chloride) Foam (Closed-Cell)

D2863 Test Method for Measuring the Minimum Oxygen Concentration to Support Candle-Like Combustion of Plastics (Oxygen Index)

D4819 Specification for Flexible Cellular Materials Made From Polyolefin Plastics

E177 Practice for Use of the Terms Precision and Bias in ASTM Test Methods

E456 Terminology Relating to Quality and Statistics

E691 Practice for Conducting an Interlaboratory Study to Determine the Precision of a Test Method

E2935 Practice for Conducting Equivalence Testing in Laboratory Applications

F355 Test Method for Impact Attenuation of Playing Surface Systems, Other Protective Sport Systems, and Materials Used for Athletics, Recreation and Play

3. Terminology

3.1 Terms used in this standard are defined in accordance with Terminology D883, unless otherwise specified. For terms relating to precision, bias and associated issues, the terms used in this standard are defined in accordance with Terminology E456.

3.2 *Definitions of Terms Specific to This Standard:*

3.2.1 *blend, n*—mixture of olefin polymers with other monomer(s) or polymer(s) in which at least 51 mass percent is the olefin polymer.

3.2.2 *flexible cellular material, n*—a cellular polymer that will not visibly rupture within a specified time when a specimen is bent around a 25.4 mm (1.0 in.) mandrel 180

*A Summary of Changes section appears at the end of this standard