



Designation: D 2842 – 9701

An American National Standard

Standard Test Method for Water Absorption of Rigid Cellular Plastics¹

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1. Scope*

1.1 This test method covers the determination of the water absorption of rigid cellular plastics by measuring the change in buoyant force resulting from immersion under a 5.1-cm (2-in.) head of water for the specified immersion period of 96 h.

1.2 This test method describes two procedures that may be used to measure the change in buoyant force. Procedure A should be used for materials that either experience rapid water absorption or that show an increase in volume during the exposure period, or both. Materials that do not exhibit either of these characteristics should be evaluated by Procedure B.

1.3 For specific applications, immersion periods varying from the normal 96-h test requirement shall be agreed upon between the manufacturer and the purchaser.

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

NOTE 1—This test method and ISO 2896 are technically equivalent.

2. Referenced Documents

2.1 ASTM Standards:

D 3576 Test Method for Cell Size of Rigid Cellular Plastics²

¹ This test method is under the jurisdiction of ASTM Committee D-20 on Plastics and is the direct responsibility of Subcommittee D20.22 on Cellular Materials- Plastics and Elastomers.

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