



**Summary of Substantive Changes
between the 2011 and the 2020 editions of
ASTM D1784 “Standard Classification System and Basis for Specification for
Rigid Poly(Vinyl Chloride) (PVC) Compounds and
Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds”**

Presented to the IAPMO Standards Review Committee on April 20, 2020

General: The changes to this standard should not have an impact on currently listed products. The changes are:

- Clarified the scope by adding the word fittings to products covered under the standard application (see Section 1.1)
- Excluded the allowance of changing the material composition base on the agreement between the purchaser and the seller (see Sections 6.1, and 12.1)
- Increased the tolerance for relative humidity from 5% to 10% in the specimen conditioning and test conditions (see Section 11.2)
- Removed requirements for packaging and package marking except compliance with ASTM D3892 (see Section 13.1)

Title was changed as follows:

[Standard Classification System and Basis for Specification for Rigid Poly\(Vinyl Chloride\) \(PVC\) Compounds and Chlorinated Poly\(Vinyl Chloride\) \(CPVC\) Compounds](#)

Section 1, Scope: Clarified the scope by adding the word fittings to products covered under the standard application as follows:

Section 1.1:

1.1 [This classification system standard](#) covers rigid PVC and CPVC compounds intended for general purpose use in extruded or molded form—including [fittings and both](#) pressure ~~pipng applications~~ and nonpressure piping applications—composed of poly(vinyl chloride), chlorinated poly(vinyl chloride), or vinyl chloride copolymers containing at least 80 % vinyl chloride, and the necessary compounding ingredients. The compounding ingredients shall be permitted to consist of lubricants, stabilizers, non-poly(vinyl chloride) resin modifiers, pigments, and inorganic fillers.

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1.3 The requirements in this ~~specification~~ [classification system standard](#) are intended for the quality control of compounds used to manufacture finished products. These properties are based on data obtained using standard test specimens tested under specified conditions. They are not directly applicable to finished products. See the applicable ASTM standards for requirements for finished products.

1.4 The text of this ~~specification~~ [classification system standard](#) references notes and footnotes that provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of this specification.



1.5 Some rigid PVC applications have the option to contain recycled PVC ~~recycle~~ plastics ~~meeting that meet~~ the requirements of this ~~specification~~ classification system standard. Refer to the specific requirements in the materials and manufacture section of the applicable product standard.

Section 6, Materials and Manufacture: Excluded the allowance of changing the material composition base on the agreement between the purchaser and the seller as follows:

6.1 Materials supplied under this specification shall be PVC and CPVC compounds of uniform composition in the form of cubes, granules, ~~freeflowing powder blends~~, or ~~compacted~~ powder blends.

~~6.2 Materials shall be of uniform composition and size and shall be free of foreign matter to such level of contamination as may be agreed upon between the purchaser and the seller.~~

~~6.3~~6.2 Color and transparency or opacity of molded or extruded articles formed under the conditions recommended by the seller shall be comparable within commercial match tolerances to the color and transparency or opacity of standard molded or extruded samples of the same thickness supplied in advance by the seller of the material.

Section 8, Sampling: Editorially revised for clarification as follows:

8.1 A batch or lot ~~shall be considered~~ is construed as a unit of manufacture and ~~may consist of~~ a blend of two or more production runs of material shall be acceptable.

8.2 Sample using a statistically acceptable procedure.

Section 10, Specimen Preparation: Note 7 was revised as follows:

10.1 Compliance with the designated requirements chosen from Table 1 shall be determined with compression-molded, extruded, or injection-molded test specimens for Izod impact resistance, tensile strength, tensile modulus of elasticity, deflection temperature under load, and flammability.

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NOTE 7—It is ~~possible~~ not expected or required that a specimen taken from a finished product will ~~not~~ produce the same results as a specimen prepared by the method used for purposes of cell class testing and certification.

Section 11, Test Methods: Increased the tolerance for relative humidity from 5% to 10% in the specimen conditioning and test conditions as follows:

11.2 Test Conditions—Unless otherwise specified in the test methods or in this specification, tests shall be conducted in the standard laboratory atmosphere of $23 \pm 2^{\circ}\text{C}$ ($73.4 \pm 4^{\circ}\text{F}$) and 50 ± 5 10 % relative humidity. In cases of disagreement, the tolerances shall be $\pm 1^{\circ}\text{C}$ (± 1.8 2 $^{\circ}\text{F}$) and ± 2 5 % relative humidity.

Section 12, Inspection: Excluded the allowance of changing the material composition base on the agreement between the purchaser and the seller as follows:

12.1 Inspection and certification of the material ~~shall be made as agreed upon between the purchaser and the seller as part of the purchase contract~~ supplied with reference to a specification based on this classification system shall be for conformance to the requirements specified herein.

Section 13, Packaging and Package Marking: Removed requirements for packaging and package marking except compliance with ASTM D3892 as follows:

~~13.1 Packaging—The material shall be packaged in standard commercial containers, so constructed as to ensure acceptance by common or other carriers for safe transportation at the lowest rate to the point of delivery, unless otherwise specified in the contract or order.~~



~~13.2 Marking—Unless otherwise agreed upon between the purchaser and the seller, shipping containers shall be marked with the name of the material and the name of the manufacturer; class, batch, or lot number; quantity contained therein, as defined by the contract or order under which shipment is made; the name of the seller; and the number of the contract or order.~~

~~13.3~~ 13.1 All packing, packaging, and marking provisions of Practice D3892 shall apply to this specification standard.