



Designation: D 3138 – 9502

An American National Standard

Standard Specification for Solvent Cements for Transition Joints Between Acrylonitrile- Butadiene-Styrene (ABS) and Poly(Vinyl Chloride) (PVC) Non-Pressure Piping Components¹

This standard is issued under the fixed designation D 3138; 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 reappraisal. A superscript epsilon (ε) indicates an editorial change since the last revision or reappraisal.

1. Scope

1.1 This specification provides general requirements for solvent cements used in joining acrylonitrile-butadiene-styrene (ABS) plastic pipe or fittings to poly(vinyl chloride) (PVC) plastic pipe or fittings.

1.2 These cements are intended for use in cementing transition joints between ABS and PVC materials in non-pressure applications only (25 psi (170 kPa) or less).

NOTE 1—This specification was developed to provide a means for joining an ABS non-pressure piping system using a solvent-cemented transition joint, for example, joining ABS building drain to a PVC sewer system. The intention was not to create a specification for an all purpose ABS-PVC solvent cement that would be used for mixing of ABS and PVC piping materials nor to specify a cement that could generally be used for either material. Specific cements for ABS or PVC components should be used (see 1.3).

1.3 Solvent cements used for joining PVC pipe and fittings are specified in Specification D 2564. Solvent cements used for joining ABS pipe and fittings are specified in Specification D 2235.

1.4 A recommended procedure for joining ABS to PVC pipe and fittings for non-pressure applications is given in the appendix.

1.5 The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are for information only.

1.6 The following safety hazards caveat pertains only to the test methods portion, Section 6, of this specification: *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 1084 Test Methods for Viscosity of Adhesives²

D 1600 Terminology for Abbreviated Terms Relating to Plastics³

D 1784 Specification for Rigid Poly(Vinyl Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (CPVC) Compounds³

D 2235 Specification for Solvent Cement for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Pipe and Fittings⁴

D 2564 Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems⁴

D 2661 Specification for Acrylonitrile-Butadiene-Styrene (ABS) Plastic Drain, Waste, and Vent Pipe and Fittings⁴

D 2665 Specification for Poly(Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings⁴

F 402 Practice for Safe Handling of Solvent Cements, Primers, and Cleaners Used for Joining Thermoplastic Pipe and Fittings⁴

F 412 Terminology Relating to Plastic Piping Systems⁴

F 493 Specification for Solvent Cements for Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe and Fittings⁴

3. Terminology

3.1 **Definitions:** Definitions are in accordance with Terminology F 412, and abbreviations are in accordance with Terminology D 1600, unless otherwise specified.

¹ This specification is under the jurisdiction of ASTM Committee F17 on Plastic Piping Systems and is the direct responsibility of Subcommittee F17.20 on Joining. Current edition approved Sept. 10, 1995; 2002. Published November 1995; October 2002. Originally published as D 3138 – 72. Last previous edition D 3138 – 935.

² Annual Book of ASTM Standards, Vol 15.06.

³ Annual Book of ASTM Standards, Vol 08.041.

⁴ Annual Book of ASTM Standards, Vol 08.04.