



Designation: F656 – 10

Standard Specification for Primers for Use in Solvent Cement Joints of Poly(Vinyl Chloride) (PVC) Plastic Pipe and Fittings¹

This standard is issued under the fixed designation F656; 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 specification covers requirements for primers for use with poly(vinyl chloride) (PVC) pipe and fittings that are to be joined by PVC solvent cements meeting the requirements of Specification [D2564](#).

1.2 These primers are used in pressure and nonpressure applications with plain end pipe and either socket-type fittings or bell end pipe. These primers prepare the surface of pipe and fittings before the application of solvent cement. The primer's effect on the set and cure time of the joint is dependent on the cement, pipe size, application method, temperature, and humidity.

1.3 A procedure for using the primer with cement is given in Practice [D2855](#).

1.4 The text of this specification references notes, footnotes, and appendixes which provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of the specification.

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:²

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 Aug. 1, 2010. Published August 2010. Originally approved in 1980. Last previous edition approved in 2008 as F656 – 08. DOI: 10.1520/F0656-10.

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.

[D1600 Terminology for Abbreviated Terms Relating to Plastics](#)

[D1784 Specification for Rigid Poly\(Vinyl Chloride\) \(PVC\) Compounds and Chlorinated Poly\(Vinyl Chloride\) \(CPVC\) Compounds](#)

[D2564 Specification for Solvent Cements for Poly\(Vinyl Chloride\) \(PVC\) Plastic Piping Systems](#)

[D2855 Practice for Making Solvent-Cemented Joints with Poly\(Vinyl Chloride\) \(PVC\) Pipe and Fittings](#)

[F402 Practice for Safe Handling of Solvent Cements, Primers, and Cleaners Used for Joining Thermoplastic Pipe and Fittings](#)

[F412 Terminology Relating to Plastic Piping Systems](#)

[F493 Specification for Solvent Cements for Chlorinated Poly\(Vinyl Chloride\) \(CPVC\) Plastic Pipe and Fittings](#)

2.2 NSF Standards:

[Standard No. 14 for Plastic Piping Components and Related Materials³](#)

[Standard No. 61 for Drinking Water Systems Components—Health Effects³](#)

3. Terminology

3.1 *Definitions*—Definitions are in accordance with Terminology [F412](#), and abbreviations are in accordance with Terminology [D1600](#), unless otherwise specified.

3.2 Definitions:

3.2.1 *fluorescent primer*—a primer which is clear and colorless when viewed under visible light such as sunlight and indoor lighting, but which is readily visible when viewed under UV light (also known as, black light).

4. Material Requirements

4.1 The primer shall be an organic liquid with water-like viscosity and shall not contain any undissolved particles.

4.2 The solvent system to be used in the formulation of this primer is not specified.

NOTE 1—If required for identification purposes, colorants shall be used in the primer. It is recommended that orange not be used, since this is the

³ Available from NSF International, P.O. Box 130140, 789 N. Dixboro Rd., Ann Arbor, MI 48113-0140, <http://www.nsf.org>.

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