



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, 2015. Published August 2015. Originally approved in 1980. Last previous edition approved in 2010 as F656 – 10. DOI: 10.1520/F0656-15.

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 the Two-Step (Primer and Solvent Cement) Method of Joining Poly (Vinyl Chloride) (PVC) or Chlorinated Poly (Vinyl Chloride) (CPVC) Pipe and Piping Components with Tapered Sockets

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/ANSI Standards:³

Standard No. 14 for Plastics Piping System Components and Related Materials

Standard No. 61 for Drinking Water System Components – Health Effects

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).

3.2.2 *primer*—an organic solvent or a blend of solvents, which enhances adhesion, applied to plastic pipe and fittings prior to application of a solvent cement.

4. Material Requirements

4.1 The primer shall be an organic liquid with a viscosity no greater than 65 centipoise at 25°C and shall not contain any undissolved particles.

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