



Standard Specification for Portable Gasoline and Kerosine Spill Resistant Fueling Systems for Consumer Use¹

This standard is issued under the fixed designation F 2234; 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 establishes nationally recognized performance requirements for portable gasoline and kerosene fueling systems intended for reuse by the consumer in filling, transport, dispensing, and storage. This specification does not cover single-trip prepackaged containers.

1.2 This specification defines performance requirements for systems that can effectively reduce fuel spillage and emissions when used in accordance with the manufacturer's (marked) warnings, operating instructions, and limitations of use. This specification does not provide assurance that systems meeting the requirements are suited to all fueling applications and conditions.

1.3 This specification is not a fire hazard standard. It concerns portable gasoline and kerosene containers for consumer use.

1.4 Containers used with these systems shall meet all applicable requirements of either Specification F 852 or F 976 and additional requirements as specified in this standard.

1.5 The following precautionary caveat applies only to the test method portion, Section 5, 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:

- B 117 Practice for Operating Salt Spray (Fog) Apparatus²
- D 471 Test Method for Rubber Property—Effect of Liquids³
- D 572 Test Method for Rubber-Deterioration by Heat and Oxygen³
- D 638 Test Method for Tensile Properties of Plastics⁴

D 794 Practice for Determining Permanent Effect of Heat on Plastics⁵

D 999 Methods for Vibration Testing of Shipping Containers⁶

D 2561 Test Method for Environmental Stress-Crack Resistance of Blow-Molded Polyethylene Containers⁷

D 2565 Practice for Xenon Arc Exposure of Plastics Intended for Outdoor Applications⁷

F 852 Specification for Portable Gasoline Containers for Consumer Use⁸

F 976 Specification for Portable Kerosine Containers for Consumer Use⁸

G 23 Practice for Operating Light-Exposure Apparatus (Carbon-Arc Type) With and Without Water for Exposure of Nonmetallic Materials⁹

2.2 ANSI Standard:

B71.1b Supplement to Safety Specifications for Power Lawn Mowers, Lawn and Garden Tractors, and Lawn Tractors¹⁰

3. Terminology

3.1 *Definitions*—See Specifications F 852 and F 976 for specific definitions.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *fueling system, n*—a pour spout as defined above and container intended to reduce fuel related emissions attributed to spillage, evaporation, and permeation.

3.2.2 *spill resistant spout, n*—a spout that when attached firmly to the container, will stop fuel flow when the receptacle, for example, gas tank, reaches an established level, and close and seal automatically when removed from the receptacle.

4. Requirements

4.1 Gasoline containers referred to in the specification must comply with the following sections in Specification F 852–99:

⁵ Discontinued—see 1997 *Annual Book of ASTM Standards*, Vol 08.01.

⁶ *Annual Book of ASTM Standards*, Vol 15.09.

⁷ *Annual Book of ASTM Standards*, Vol 08.02.

⁸ *Annual Book of ASTM Standards*, Vol 15.07.

⁹ Discontinued—see 1999 *Annual Book of ASTM Standards*, Vol 14.04. Replaced by G 152 and G 153.

¹⁰ Available from American National Standards Institute (ANSI), 25 W. 43rd St., 4th Floor, New York, NY 10036.

¹ This specification is under the jurisdiction of ASTM Committee F15 on Consumer Products and is the direct responsibility of Subcommittee F15.10 on Standards for Flammable Liquid Containers.

Current edition approved on July 10, 2003. Published July 2003.

² *Annual Book of ASTM Standards*, Vol 03.02.

³ *Annual Book of ASTM Standards*, Vol 09.01.

⁴ 1998 *Annual Book of ASTM Standards*, Vol 08.01.