



Approval Standard for Safety Containers and Filling, Supply and Disposal Containers for Ignitable (Flammable) Liquids

Class Number 6051-6052

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Foreword

The FM Approvals certification mark is intended to verify that the products and services described will meet FM Approvals' stated conditions of performance, safety and quality useful to the ends of property conservation. The purpose of Approval Standards is to present the criteria for FM Approval of various types of products and services, as guidance for FM Approvals personnel, manufacturers, users and authorities having jurisdiction.

Products submitted for certification by FM Approvals shall demonstrate that they meet the intent of the Approval Standard, and that quality control in manufacturing shall ensure a consistently uniform and reliable product. Approval Standards strive to be performance-oriented. They are intended to facilitate technological development.

For examining equipment, materials and services, Approval Standards:

- a) must be useful to the ends of property conservation by preventing, limiting or not causing damage under the conditions stated by the Approval listing; and
- b) must be readily identifiable.

Continuance of Approval and listing depends on compliance with the Approval Agreement, satisfactory performance in the field, on successful re-examinations of equipment, materials, and services as appropriate, and on periodic follow-up audits of the manufacturing facility.

FM Approvals LLC reserves the right in its sole judgment to change or revise its standards, criteria, methods, or procedures.

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1 INTRODUCTION

1.1 Purpose

- 1.1.1 This standard states Approval requirements for safety containers and filling, supply or disposal containers for ignitable liquids. These containers have openings equipped with tightly fitting caps, or valves that remain closed unless held open for filling or discharging ignitable liquids.
- 1.1.2 Approval criteria may include, but not limited to, performance requirements, marking requirements, examination of manufacturing facility(ies), audit of quality assurance procedures, and a follow-up program.

1.2 Scope

- 1.2.1 This standard applies to safety containers and filling, supply and disposal containers for ignitable liquids.

1.3 Basis for Requirements

- 1.3.1 The requirements of this standard are based on experience, research and testing, and/or the standards of other organizations. The advice of manufacturers, users, and loss control specialists was also considered.
- 1.3.2 The requirements of this standard reflect tests and practices used to examine characteristics of safety containers and filling, supply or disposal containers for ignitable liquids for the purpose of obtaining Approval. Safety containers and filling, supply or disposal containers for ignitable liquids having characteristics not anticipated by this standard may be FM Approved if performance equal, or superior, to that required by this standard is demonstrated, or if the intent of the standard is met. Alternatively, safety containers and filling, supply or disposal containers for ignitable liquids which meet all of the requirements identified in this standard may not be FM Approved if other conditions which adversely affect performance exist or if the intent of this standard is not met.

1.4 Basis for Approval

Approval is based upon satisfactory evaluation of the product and the manufacturer in the following major areas:

- 1.4.1 Examination and tests on production samples shall be performed to evaluate:
- the suitability of the product for its intended end use
 - the performance of the product as specified by the manufacturer and required by FM Approvals; and as far as practical,
 - the durability and reliability of the product.
- 1.4.2 An examination of the manufacturing facilities and audit of quality control procedures are made to evaluate the manufacturer's ability to consistently produce the product which is examined and tested, and the marking procedures used to identify the product. These examinations may be repeated as part of FM Approvals' product follow-up program.

1.5 Basis for Continued Approval

Continued Approval is based upon:

- production or availability of the product as currently FM Approved;
- the continued use of acceptable quality assurance procedures;
- satisfactory field experience;
- compliance with the terms stipulated in the FM Approval report and Master Agreement;
- satisfactory re-examination of production samples for continued conformity to requirements; and
- satisfactory audits as least annually as part of FM Approvals Surveillance Audit Program.

Also, as a condition of retaining Approval, manufacturers may not change a product or service without prior authorization by FM Approvals.

1.6 Effective Date

The effective date of an Approval standard mandates that all products tested for Approval after the effective date shall satisfy the requirements of that standard. Products FM Approved under a previous edition shall comply with the new version by the effective date or else forfeit Approval.

The effective date of this standard is June 30, 2017 for compliance with all requirements.

1.7 System of Units

Units of measurement used in this Standard are United States (U.S.) customary units. These are followed by their arithmetic equivalents in International System (SI) units, enclosed in parentheses. The first value stated shall be regarded as the requirement. The converted equivalent value may be approximate. Appendix A lists the selected units and conversions to SI units for measures appearing in this standard.

1.8 Applicable Documents

The following standards, test methods, and practices are referenced in this standard:

Test Procedure, *Stability for Safety Containers and Filling, Supply and Disposal Containers*

Test Procedure, *Leakage of Safety Containers and Filling, Supply and Disposal Containers.*

Test Procedure, *Strength of Pouring Spout and Handle of Safety Containers and Filling, Supply and Disposal Containers.*

Test Procedure, *Test Method of Fire Exposure for Safety Containers and Filling, Supply and Disposal Containers*

Test Procedure, *Test Method for Flame Arrester Components.*

Test Procedure, *Test Method of Abuse for Safety Containers and Filling, Supply and Disposal Containers*

Test Procedure, *Test Method of Weight Loss for Safety Containers and Filling, Supply and Disposal Containers.*

Test Procedure, *Test Method of Mechanical Strength for Safety Containers and Filling, Supply and Disposal Containers.*