



Member of the FM Global Group

Approval Standard for Composite Intermediate Bulk Containers (IBCs)

Class Number 6020

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Foreword

The FM Approvals certification mark is intended to verify that the products and services described will meet 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 composite Intermediate Bulk Containers (IBCs) with a capacity of 275 gal (1000 liters) or 330 gal (1250 liters) used for the storage of liquids with closed cup flash points greater than 200°F (93°C).
- 1.1.2 Approval criteria may include, but are not limited to, performance requirements, marking requirements, examination of manufacturing facility(ies), audit of quality assurance procedures, and a follow-up program.
- 1.1.3 For all IBCs, the Approval is limited to the storage of sealed containers only that are used in storage applications.
 - 1.1.3.1 For all IBCs, the Approval is void once the valve cap seal has been broken.
 - 1.1.3.2 For IBCs that use a barrier to protect the primary container from fire exposure, the Approval is void once the barrier has been removed.
 - 1.1.3.3 For all IBCs, the Approval is valid for single-use only. The Approval is void once the IBC is recycled or reused.
- 1.1.4 The IBC manufacturer shall communicate with the end user to ensure that the fluid and the composite IBC materials are compatible.

1.2 Scope

- 1.2.1 This standard sets the fire performance requirements for composite IBCs constructed with combustible and non-combustible components including metal, plastic and corrugated board materials with a capacity of 275 gal (1000 liters) or 330 gal (1250 liters).
- 1.2.2 This standard is intended to verify that the systems as described will meet the stated conditions of the performance, and quality useful to determine the suitability for end-use conditions of these products.

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, trade associations, jurisdictions and/or loss control specialists was also considered.
- 1.3.2 The requirements of this standard reflect tests and practices used to examine characteristics of composite IBCs for the purpose of obtaining Approval. Composite IBCs 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, composite IBCs 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.