

A comparison of GFSI Standards for Packaging Materials – Which Standard is Right For You?

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Objectives

- Understand the similarities and differences between the standards.

Food Packaging

Packaging materials serve a variety of important functions.

- Protect food products from pathogenic microorganisms, food spoilage organisms and pests beyond manufacturing stage;
- Protect products from oxygen and moisture ingress;
- Protect the integrity of food products during storage, handling and transport (tamper evidence, counterfeit etc.);
- Provide product related information to consumers

Types of Packaging

There are three types of food packaging,

- Primary packaging
- Secondary packaging
- Tertiary packaging

A robust food safety program should take into account the potential hazards associated with all three types of packaging.

Packaging Materials and Food Safety Risks

Hazards associated with packaging materials. Example,

- Use of proper laminates in the packaging of food products to avoid migration of hazardous chemicals into food;
- Use of approved printing inks in the manufacture of packaging materials meant for food products to avoid migration of harmful substances;
- Use of approved lacquers for the interior of cans in the canning industry
- Wrong labelling of products

Food Packaging Materials and Regulation

- European Regulation
- US Regulation

Overview of US Regulations

Authorization/Notification required	Exempted from authorization
Direct Additive (21 C.F.R. Part 170.3)	
Indirect Additive (21 C.F.R. Part 174-179)	<u>GRAS</u> <ul style="list-style-type: none">• Common food ingredient before 1958• Manufacturer self-determined GRAS• FDA listed GRAS• FDA approved GRAS• FDA GRAS notification
<u>Food Contact Notification</u> (FCN) program (<i>only notification required</i>)	Sanctioned before 1958

GFSI standards for Food Packaging Materials

- BRC Global Standard for Packaging and Packaging Materials, issue 4
- SQF Code, edition 7.2
- IFS PAC Secure version 1
- FSSC 22000: 2013

Benefits of Third Party Certification

- Provides a means of confirmation to the applicable food regulations and laws.
- Facilitates meeting customer requirements.
- Improves the overall performance through team work.
- Protects brand image

BRC Global Standard for Packaging- Scope

Applicable to the manufacture of packaging and packaging materials used in food packaging and filling operations .To packaging and packaging materials for cosmetics, toiletries and other consumer products and materials.

- prior operations (production of packaging materials for conversion or printing);
- operations that supply packaging materials from stock where additional product processing or repacking occurs;
- packaging manufacturers who also produce consumer disposable goods that come in contact with food (example, paper plates, drinking cups)
- manufacture and supply of other materials that are converted or semi converted and used or incorporated (example, adhesives).

BRC Packaging Standard-Product Categories

- High-Hygiene Risk: Packaging that comes in direct contact with food products (or other hygiene sensitive products). Primary packaging used for food or other hygiene sensitive products where there is no absolute barrier in place.
- Low-Hygiene Risk: Packaging for consumer products and the secondary and tertiary packaging for all uses.

BRC Packaging Standard Requirements

High-Hygiene Risk: The requirements have been outlined under the following six sections (4).

1. Senior Management Commitment and Continual Improvement (4 sub sections)
2. Hazard and Risk Management System (3 sub sections)
3. Product Safety and Quality Management System (11 sub sections)
4. Site Standards (12 sub sections)
5. Product and Process control (8 subsections)
6. Personnel (5 subsections)

SQF Code- Scope

The Code is applicable to the various sectors in the supply chain such as food production, manufacturing, storage and distribution, retailing etc. and not specific to the manufacture of packaging materials.

However, the Code has specific GMP requirements for the manufacture of packaging materials.

SQF Code- Product Categories

- No differentiation in the requirements for primary and secondary packaging materials in the Code
- Module 2 of the SQF Code outlines the management system elements for all sectors of the supply chain
- Module 13 covers the Good Manufacturing Practices requirements for the production of food packaging

SQF Code- Requirements

- Module 2: Management System elements
- Module 13: GMP requirements for the packaging materials manufacturing sector

IFS PAC Secure- Scope

- Meant for auditing primary and secondary packaging material manufacturers and converters
- IFS PAC Secure is also applicable to non-food contact packaging materials, such as: packaging materials for cosmetics products, household products, consumer goods, hardware, etc.)
- IFS PAC Secure standard does not apply to the following activities:
 - Importation (offices, e.g. typical broker companies)
 - Transport, storage and distribution.

IFS PAC Secure- Requirements

The requirements are outlined in six sections

- Senior management responsibility
- Quality and Packaging Material Safety Management
- Resource Management
- Planning and Production Process
- Measurement, Analysis and Improvements
- Packaging material defense/Food defense and external inspections

FSSC 22000 Standard- Scope

Intended for the audit and certification of food safety systems, which ensure the safety of products during manufacturing of:

- perishable animal products (i.e. meat, poultry, eggs, dairy and fish products)
- perishable vegetal products (i.e. packaged fresh fruits and fresh juices, preserved fruits, packaged fresh vegetables, preserved vegetables)
- products with long shelf life at ambient temperature (i.e. canned products, biscuits, snacks, oil, drinking water, beverages, pasta, flour, sugar, salt)
- (bio) chemical manufacturing (food ingredients i.e. vitamins, additives and bio cultures) but excluding technical and technological aids
- food packaging manufacturing (i.e. direct, indirect contact with the food)

FSSC 22000 Standard- Requirements

- ISO 22000:2005 (Food safety management systems —Requirements for any organization in the food chain)
- ISO 22002-4:2011 (pre-requisite program for packaging material manufacturing)
- FSSC 22000:2013 (Part 1; additional FSSC requirements)

Comparison between the Four GFSI Standards

	Criteria	BRC Global Standard for Packaging and packaging Materials, Issue 4	SQF Category 27 areas of Edition 7.2	IFS PACSecure Version 1	FSSC Category M Version 3
1	Scope of standard	Wide range (prior operation- conversion or printing; additional processing or re-packing; consumer disposable goods that come in contact with food; packaging materials for cosmetics, toiletries and other consumer products)	Covers only those packaging materials and packaging products that come in contact with food.	Primary and secondary food packaging materials and non-food contact applications.	Covers only those packaging materials and packaging products that come in contact with food.
2	Focus	Product safety, quality and operational criteria	Only product safety (level 2) and safety and quality (level 3)	Product safety and quality	Only product safety
3.	Packaging materials	<p>The Packaging Standard identifies five areas of product type/field:</p> <ol style="list-style-type: none"> 1. Glass 2. Paper 3. Metals 4. Plastics 5. Wood and other materials <p>The fields are used to ensure that an auditor with the correct expertise audits the site.</p>	<p>Five areas of product type/field:</p> <ol style="list-style-type: none"> 1. Glass 2. Paper 3. Metals 4. Plastics 5. Wood and other materials <p>However, the field of specialization of auditors and the requirement of auditors to have expertise in the fields are not explicit and strictly enforced.</p>	<p>Six areas of product type/field:</p> <ol style="list-style-type: none"> 1. Glass 2. Paper 3. Metals 4. Plastics 5. Wood and other materials 6. Natural packaging materials 	<p>The Packaging Standard identifies five areas of product type/field:</p> <ol style="list-style-type: none"> 1. Glass 2. Paper 3. Metals 4. Plastics 5. Wood and other materials <p>The fields are used to ensure that an auditor with the correct expertise audits the site.</p>

Comparison between the Four GFSI Standards

4	Risk categorization of standard	Defines 2 product hygiene risk categories (high hygiene risk category for packaging intended to come into direct contact with high risk products; low hygiene risk category is for packaging used for non-food primary packaging, such as consumer products, and secondary and tertiary packaging for all uses)	Intended for primary packaging materials.	Intended for primary and secondary packaging materials.	Intended for primary and secondary packaging materials.
5	Number of audit stages	Single stage audit	Two stage audit	Single stage audit	Two stage audit
6	Audit duration	Typically 1.5 days	Typically 1.0 day for document review and 1.5-2.0 days for the facility audit	Typically 1.5 days	Varies; Typically 1.0 day for stage 1 and 1.5-2.0 days for stage 2 audit
7	Audit Grade	Three grades, A, B and C depending on level and number of non-conformities	Graded; Complaint (C), Good (G) and Excellent (E) depending on level and number of non-conformities	Scored, but not graded	Not graded.
8	Number of certs issued	2270 worldwide (Europe 2180; N. America 46; UK 606)	181 (mostly in the US)	Information not available	Information not available

Comparison between the Four GFSI Standards

9	Benefits of the standard	<ul style="list-style-type: none"> • Standalone Standard • Quality as well as safety and hygiene (print, process control) • Mature and well established – 2000 sites; consistent growth • Crossover with ISO standards 	<ul style="list-style-type: none"> • Vertically integrated • Crossover with ISO standards 	<ul style="list-style-type: none"> • Standalone Standard • Crossover with ISO standards 	<ul style="list-style-type: none"> • Vertically integrated
10	Standard Structure	<p>Product safety, quality and legality requirements integrated into one standard. under the following sections,</p> <ul style="list-style-type: none"> • Senior Management Commitment and Continual Improvement • Hazard and Risk Management System • Product Safety and Quality Management System • Site Standards • Product and Process Control • Personnel 	<p>Module 2: Management system related requirements</p> <p>Module 13: Pre-requisite program requirements</p>	<p>Product safety, quality and legality requirements integrated into one standard. under the following sections,</p> <ul style="list-style-type: none"> • Senior management responsibility • Quality and Packaging Material Safety Management • Resource Management • Planning and Production Process • Measurement, Analysis and Improvements • Packaging material defense/Food defense and external inspections: 	<p>ISO 22000:2005 Management system related requirements.</p> <p>ISO 22002-4:2013: Pre-requisite program requirements.</p>
11	Accreditation	ISO 17065 Scheme	ISO 17065 Scheme	ISO 17065 Scheme	ISO 17021 Scheme

Which Standard Is Right For You?

BRC?

SQF?

IFS PAC Secure?

FSSC 22000?



Questions?