

**Ansell**



# FOSTERING FOOD SAFETY

# UNDERSTANDING THE REQUIREMENTS FOR FOOD CONTACT PPE

Food production and supply is a complex global industry that comprises many sub-sectors and occupations. Workers across the entire supply chain need comfortable and reliable personal protective equipment (PPE) that not only offers suitable defence against the specific hazards they face, but also provides the necessary safeguards against food contamination risk at every touchpoint.

The production and supply of food is bound by stringent conditions designed to avoid contamination and guarantee food safety, and this includes the use of gloves certified for food contact use. Navigating the specific regulatory requirements of each environment can be challenging, particularly when multiple geographic locations are involved.

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## FOOD REGULATORY BODIES

Depending on the processing and handling locations, as well as the eventual product endpoint, food operations must comply with applicable standards and regulations – usually either European Union Food Contact legislation, the United States Food & Drug Administration (FDA) regulations, or a combination of both.

In addition, most countries have an authority responsible for developing and overseeing localised food contact legislations. These national legislations govern practices and behaviours in food handling, along with requirements for the premises and equipment used to produce, process and prepare food items.



# REGULATIONS, STANDARDS AND RATINGS

Food contamination occurs in one of four ways:

## 1. BIOLOGICAL

When food becomes contaminated by humans, animals, bacteria, viruses or other microorganisms, leading to food-borne illnesses.

## 2. PHYSICAL

When an object enters food in production or preparation process. This can present a choking hazard and potentially introduce biological contaminants.

## 3. CHEMICAL

This occurs when food comes into contact with toxic chemicals and can lead to chemical food poisoning.

## 4. ALLERGEN CROSS-CONTAMINATION

When an allergen is transferred to different food, creating risk for those with food allergies.

Globally, legislation, standards and food management systems have been designed to manage food safety risk and avoid contamination, including the use of PPE that is certified as safe for food contact.



## European Union food contact legislation



The European Union legislation includes Regulation 1935/2004 and Regulation 2023/2006. These are designed to ensure that materials and articles in contact with foodstuffs will:

- Prevent substances from being transferred to food
- Be made with only legally acceptable food-contact ingredients
- Comprise raw materials that are certified safe for food contact and are procured from approved suppliers

### Regulation 1935/2004

Regulation 1935/2004 (passed in 2004 but applicable as of 27th October 2006) addresses materials and articles 'intended to come into contact with foodstuffs' and provides a framework for general safety criteria applicable to all food-contact materials.

Specifically, the regulation requires that food contact materials must not release their constituents into food at levels harmful to human health or change food composition, taste and smell in an unacceptable way. To meet requirements, each product must be accompanied with the food symbol and/or the words 'for food contact'.

### Regulation 2023/2006

Regulation 2023/2006 (passed in 2006 but applicable as of 1st August 2008) specifically addresses the Good Manufacturing Practices (GMP) safety system associated with production of gloves and articles intended to come into contact with foodstuffs.

## FDA Code of Federal Regulations (CFR)

Title 21, parts 174 to 190



The FDA's CFR Title 21 outlines provisions applicable to indirect food additives and the threshold of regulation for substances used in food contact articles.

**Under these regulations, equipment for food contact must be 'made of material that will not contaminate food'. The FDA's Code of Federal Regulations provides long lists of materials which are permitted for use in food contact articles, including gloves.**

# MIGRATION INTO FOOD

The emphasis on material requirements for food contact articles is based on chemistry. A food glove, like a food packaging, is a polymeric association of ingredients and molecules (starting monomers and additives). Those molecules are linked together and, due to the chemical aggressiveness of foodstuffs – especially those with fats and acids – the polymer degrades on contact and releases molecules into the food.

This is an accepted phenomenon, but food safety assurance requires adherence to the specific migration limit (SML) and overall migration limit (OML). These are safety limits of the migration of ingredients into food (resulting from contact) that are set based on toxicological studies.

# FOOD SAFETY SYSTEMS

The Good Manufacturing Practices (GMP) and Hazard Analysis Critical Control Points (HACCP) are international food safety systems that are used throughout the world.

## Good Manufacturing Practices

GMP is the first step to safe food production. It stipulates the practices, processes, equipment, facilities and control methods required to safely produce food. It covers:

- General provisions
- Maintenance, layout, and operations of food processing facilities
- Requirements and expectations for the design, construction, and maintenance of equipment and utensils to ensure sanitary conditions
- Sanitation processes and controls necessary to ensure that food is suitable for human consumption

Manufacturers of materials and articles intended to come into contact with food must supply a written GMP declaration of conformance to indicate that products have been manufactured in accordance with the required regulatory requirements.

## Hazard Analysis Critical Control Points

HACCP is a system to manage food safety risk. It identifies, evaluates, and controls food safety hazards based on the following principles:

- Principle 1: Conduct a hazard analysis
- Principle 2: Determine the critical control points (CCPs)
- Principle 3: Establish critical limits
- Principle 4: Establish monitoring procedures
- Principle 5: Establish corrective actions
- Principle 6: Establish verification procedures
- Principle 7: Establish record-keeping and documentation procedures

HACCP aims to eliminate risk and ensure the requirements of safe food handling are carried out, enabling companies to meet world's best practice food safety standards.

# SAFETY RESPONSIBILITY

Food safety is the responsibility of every participant in the supply chain, including safety and operations managers responsible for selection of appropriate PPE.

To reduce chemical contamination risk and ensure adherence to specified limited migration rates, opt for products that are manufactured according to GMP/HACCP principles and that meet the required regulatory provisions. Ask for written declarations to ensure that products comply with food handling legislation and are guaranteed to deliver the highest levels of food safety.



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