Food Contact Materials
Introduction

Food comes into contact with many materials and articles during its production, processing, storage, preparation and serving, before its eventual consumption. Such materials and articles are called food contact materials (FCMs). Examples include containers for transporting food, machinery to process food, packaging materials, kitchenware and tableware. Such materials should be sufficiently inert so that their constituents neither adversely affect consumer health nor influence the quality of the food. To ensure the safety of FCMs, and to facilitate the free movement of goods, a series of legal requirements and controls are in place in the European Union (EU).

More information on FCMs can be found on the European Commission’s website at http://ec.europa.eu/food/food/chemical safety/foodcontact/index_en.htm including links to all the relevant legislation.
Legislation

EU law provides for binding rules that business operators must comply with. Rules can be of general scope, i.e. apply to all FCMs, or apply to specific materials only. EU law may be complemented with Member States national legislation if specific EU rules do not exist.

General legislation

Regulation (EC) No 1935/2004 provides a harmonised legal EU framework. It sets out the general principles of safety and inertness for all FCMs.

The principles set out in Regulation (EC) No 1935/2004 require that materials do not:

- release their constituents into food at levels harmful to human health;
- change food composition, taste and odour in an unacceptable way.

Moreover, the framework provides:

- for special rules on active and intelligent materials (they are by their design not inert);
- powers to enact additional EU measures for specific materials (e.g. for plastics);
- the procedure to perform safety assessments of substances used to manufacture FCMs involving the European Food Safety Authority;
- rules on labelling including an indication for use (e.g. as a coffee machine, a wine bottle, or a soup spoon) or by reproducing the symbol;
- for compliance documentation and traceability.
**Good manufacturing practice**

*Regulation (EC) No 2023/2006* ensures constant conformity with requirements in the manufacture of FCMs through:

- premises fit for purpose and staff awareness of critical production stages,

- documented quality assurance and quality control systems maintained at the premises, and

- selection of suitable starting materials for the manufacturing process with a view to the safety and inertness of the final articles.

**EU legislation on specific materials and substances**

In addition to the general legislation, certain FCMs — ceramic materials, regenerated cellulose film, plastics (including recycled plastic), as well as active and intelligent materials — are covered by specific EU measures. There are also specific rules on certain starting substances used to produce FCMs.

The most comprehensive measure is the EU Regulation on plastic materials and articles, *Regulation (EU) No 10/2011*. It outlines the rules on the composition of plastic FCMs, including the establishment of a Union List of substances that are permitted for use in the manufacture of plastic FCMs. It assigns a specific number to each substance.

**Communication**

Producers of FCMs must also ensure adequate communication on the safe use of their products.

Such communication should be directed to downstream users in the supply chain to ensure appropriate use of intermediate materials, and instructions for consumers to inform them about the safe and appropriate use of articles, if necessary.
Regulation 10/2011 sets out rules to determine the compliance of plastic materials and specifications as well as restrictions on the use of these substances. The latter includes migration limits which specify the maximum amount of substances allowed to migrate to food. The total migration of substances from a plastic to a food may not exceed 60 mg/kg food.

The attempt to make the best use of resources means that recycling is becoming more common in manufacturing. Thus Regulation (EC) No 282/2008 sets rules for recycled plastic, given that it may be contaminated with unknown substances.

Active and intelligent materials extend the shelf-life by maintaining or improving the condition of packaged food, by releasing or absorbing substances to or from the food or its surrounding environment. As a result they are exempted from the general inertness rule in Regulation (EC) No 1935/2004. The specific rules in Regulation (EC) No 450/2009 apply to address their specific purpose, e.g.:

- absorption of substances from food packaging interiors such as liquid and oxygen;
- release of substances into the food such as preservatives;
- indicate expiry of food through release of colour-change-provoking substances subject to duration and temperature of storage.

A Union list of substances permitted for the manufacture of active and intelligent materials is due to be established.

Retailers and consumers should ensure that they follow the correct instructions for use to avoid contamination of the food with substances from the material. Such contamination may not be obvious and using the material for unintended purposes may be unsafe.

Communication within the supply chain is largely achieved via the Declaration of Compliance. Labelling is the main tool to communicate with retailers and consumers.
National legislation on specific materials

When there is no specific EU legislation, Member States may establish national measures. There are, for instance, no specific EU measures on paper and board, metal, glass or printing inks. Some Member States therefore have their own rules. An overview can be found on the European Commission’s website.

Harmonisation and future legislation

The European Commission is currently analysing the industry supply chain involved in manufacture and marketing of FCMs. It is also collecting information on national measures for materials for which there is no specific EU legislation.
On the basis of this analysis the European Commission will assess the efficiency and effectiveness of the present situation, including the benefits, administrative burdens and costs for businesses. Potential regulatory inconsistencies and obstacles in the free movement of these materials and articles on the EU market will also be taken into account. The resulting report will provide the basis for the consideration of which, if any, steps need to be taken in the future on FCMs in the EU.

**Enforcement**

Enforcement of compliance with FCM legislation is the responsibility of the Member States. Their competent authorities check the documentation held by FCM producers, visit their premises and collect samples there or on the market to perform laboratory tests. At Member State level, the National Reference Laboratories (NRLs) assist in this task while the European Union Reference Laboratory for Food Contact Materials provides scientific and technical assistance to the NRLs.