Packaging gets products safely and securely from the point of production to the point of sale and use. Without packaging, food and other goods would be lost due to handling damage, lack of hygiene and insufficient information on product use.

Cartons are made from cartonboard. Cartonboard is the raw material used to manufacture cartons, which are used to package a wide range of products that includes the simplest to the most expensive: from foodstuffs such as dry food, cakes and biscuits, chocolate and confectionary, frozen food, and convenience food; to non-food products such as cosmetics, washing powder, household products and pharmaceuticals.

Without cartons, consumers would not have access nor be able to use many of the products available on the market today.

**HEALTH AND SAFETY**

Consumer health and safety is a top priority for the folding carton industry. The materials used in the production of packaging solutions, as well as the rigorous work practices and procedures that are followed, safeguard this.

The industry has proven track record in addressing any health and safety alerts that arise, and of working hand in hand with stakeholders to find fast, appropriate and safe solutions. An example of this was our reaction in 2009 to the alert over the use of certain UV inks and varnishes containing migrating photo initiators. ECMA very quickly adopted a public recommendation to stop the use of these types of inks and varnishes for food packaging, and recommended the introduction of specially designed low migration UV inks or alternative ink and varnish systems.

More recently, there has been concern over the migration from carton packaging of mineral oils from printing inks into foodstuff. Despite the fact that no firm evidence or scientific data has been presented yet to support this concern, our industry is doing everything it can to address the matter. For example, as a precautionary measure, we have recommended using only low migration inks for food packaging and have taken the position that recycled cardboard is safe when adopted in combination with a systematic risk assessment procedure on the total packaging concept.

We also fully support and willingly cooperate with the regulatory bodies such as DG Sanco and scientific organisations such as the European Food Safety Authority, and act upon any findings accordingly.

**The GMP-Driving Best Practice:**

Best practice is key to safeguarding consumer health and safety. Our European Guide to Good Manufacturing Practice for Cartonboard-based Food Packaging (GMP) focuses on the design, development and specification stages in the manufacturing process of carton. It covers the entire carton production process, from raw material intake, through design for compliance and manufacturing, to storage and delivery, and also features a specific guidance chapter on inks.

In line with Article 3 of Regulation [EC] No 1935/2004, the primary objective of this guidance document is to provide practical advice and information to enable printers and converters to prevent:
- health hazards that may result from excessive migration of components of the packaging material into the packaging food product
- unacceptable changes in the composition of the food
- unacceptable changes in the organoleptic (in particular taint and odour) characteristics of a food product that may result from the release of components.

This publication also gives guidance on compliance with the Good Manufacturing Regulation (EC) No 2023/2006. In this regulation “good manufacturing practices” are defined as those aspects of quality assurance that ensure materials and articles are consistently produced and controlled to ensure conformity with applicable rules and quality standards. All types of contamination from inks or varnishes, used substrates, the printing process and the environment, as well as all types of possible migration, are taken into account.

Source: Club MCAS

This GMP is relevant to all companies that manufacture cartons intended to come into contact with food.

It is an information and management tool with a clear methodology based on the following principles:
- senior management sponsorship of compliance with the GMP
- full clearing of the production process
- a Quality Management System such as ISO 9001 and a strict workplace hygiene control system (BRC IOP/EN 15593/ISO 22000 or equivalent) needs to be in place
- well-documented risk assessments based on an appropriate selected approach: worst case calculations, mathematical modelling or analytical testing
- clear customer communication on the chemical and physical properties of food, storage conditions and final use
- design specifications with compliance as joint responsibility between customer and packaging supplier
- adequate control points throughout the production process
- communication and education/training.

This comprehensive 53-page sector specific GMP guide can be consulted in five different languages on the ECMA website (www.ecma.org). Commercial partners can also access the list of carton makers that have issued a self-declared formal compliance statement. Companies declaring compliance with the ECMA GMP are allowed to use the created ECMA Compliance Seal visual.

**Consumer health and safety – a shared supply chain responsibility**

ECMA members do everything to safeguard consumer health and safety, and we are proud of our track record in driving advances. We recognise, however, that health and safety is a shared responsibility across the entire packaging supply chain, from the suppliers of raw materials, to the packaging converters, the food producers and the retail partners. Openness and collaboration between supply chain partners is essential to reducing risks and finding the best solutions to food safety issues.
GLOSSARY

CARTON: the end product used to package goods.

CARTONBOARD: this is the raw material used to manufacture cartons. It is either made from fibre from newly harvested virgin trees or from recycled fibre from paper.

LOW MIGRATION INKS AND VARNISHES: specially developed inks and varnishes that comply with all food safety legislation in place.

MINERAL OILS: a colourless, odourless liquid by-product of the distillation of petroleum. Mineral oils are in non-adapted conventional inks for food packaging. Contamination with mineral oils may also occur through the recovery of graphic paper into recycled paper and board substrates.

UV INKS AND VARNISHES: UV refers to the ultraviolet drying process. Photo initiators are substances present in UV inks and varnishes. Influenced by the energy from the UV rays, they contribute to the polymerisation of the ink.

ABOUT ECMA

ECMA – the European Carton Makers Association - is recognised as the association securing the sustainable development of the whole European folding carton industry. It is ECMA’s mission to develop, manage and maintain networking and information platforms and to represent the interests of the whole European folding carton industry.

With its seat in The Hague, The Netherlands, ECMA represents 500 carton producers in nearly all countries in the European Economic Area. Around 70% of the total carton market volume in Europe, and a current workforce of about 50,000 people are represented in ECMA.

www.ecma.org

Cartons in the 21st Century:
A safe packaging solution

This brochure contains information and photographic material from the Pro Carton ECMA Carton Award Competition and Club MCAS.