SunChemical®
a member of the DIC group
Color & Comfort

Legislation – Direct Food Contact

Generally speaking, the legislative requirements for printing direct food contact (DFC), where the printed surface will be in contact with food, are no different to print on the non-food contact surface: the material must be inert, not transfer components to food in quantities which could endanger human health, not alter the organoleptic properties or adulterate the food.

A DFC ink is defined as an ink that is intended to be, or can foreseeably be, in direct physical contact with food. For DFC applications the diffusion path between ink/coating and food is short, and so there is a greater potential for migration. Transient food contact is a specific type of DFC in which inks can foreseeably be in contact with food for relatively short periods of time; in this situation the potential for migration exists but is not as high as for long term direct food contact. Due to the wide range of scenarios such as the specific nature of the packaged goods and contact time, which may be from a few minutes to many months, the feasibility and selection of suitable ink products needs to be made on a case-by-case basis.

Inks for direct food contact will almost always require a more rigorous process of selection of raw materials and formulation design, to minimise Non-Intentionally Added Substances (NIAS) such as impurities. In addition, a more controlled process for manufacture, including contamination control (from previous batches & from cleaning materials) and hygiene control, needs to be implemented. In most cases printing should be conducted using specifically formulated inks and coatings, possibly using approved food additives and/or colourants. In all cases it will be necessary to seek expert advice and recommendations from ink suppliers and conduct a risk assessment as without this there is a high probability that the printed packaging will not comply with the relevant legislation due to the very close proximity of the ink to the packaged food and greater risk of ink component migration.

Although some legislation states that it does not apply to direct food contact scenarios, notably the Swiss Inks Ordinance (SR 817.023.21) and Annex I of the GMP Regulation (EU No 2023/2006), in practice the same obligations will apply: the inks must still be manufactured using good manufacturing practice (GMP) and comply with migration limits (SMLs) to meet the generic safety requirements.

In addition, some legislation may not allow the printed surface to come into contact with food (e.g. EU Regenerated Cellulose Directive, Morocco), or specify positive lists of permitted materials and/or purity requirements (e.g. China, Netherlands & Belgium (coatings).

The information contained herein is based on data believed to be up-to-date and correct at the time writing. It is provided to our customers in order that they are able to comply with all applicable health and safety laws, regulations, and orders. In particular, customers are under an obligation to carry out a risk assessment under relevant Good Manufacturing Practices (GMP) in line with legislation and as a result take adequate measures to protect consumers.