



Customer Communication

Siegwerk Printing Inks for Food Packaging — Regulations in India

Siegwerk receives inquiries about the suitability of its printing inks for food applications. The purpose of this statement letter is to clarify many of the issues that arise, including those concerning the regulatory requirements in India.

Background:

In India, the Food Safety and Standards Authority of India (FSSAI) is responsible for protecting and promoting public health through the regulation and supervision of food safety. FSSAI has been established under the Food Safety and Standards Act, 2006.

Food packaging:

The 'Food Safety and Standards Act' (FSSA, No. 34 of 2006) introduces regulation on food contaminants, in particular including contaminants from packaging. Specific provisions on packaging are detailed out in the 'Food Safety and Standards (Packaging and Labelling) Regulations, 2011'. Section 2.1.1 (2) regulates plastics in contact with food, stating generally that "containers made of plastic materials should conform to the following Indian Standard Specification (IS)" (followed by a list of 10 Indian Standards on 10 different plastic types previously issued by the Bureau of Indian Standards). These Standards include overall migration limits (identical to those in the EU) and/or positive lists of authorized substances for the 10 plastic types (but not for printed layers), with maximum concentration limits.

The voluntary Indian Standard IS 9833 "List of pigments and colorants for use in plastics in contact with foodstuffs, pharmaceuticals and drinking water" was first published in 1981. A new version is currently under revision. This Standard lists certain pigments that may be used for plastics in direct contact with food, and gives purity requirements for these pigments. As it is for plastics in direct food contact, it is not applicable for pigments used in printing inks, which do usually not come into direct contact with foodstuffs.

Ink:

The **voluntary Indian Standard IS 15495:2004** 'Printing Ink for food packaging – Code of practice' prescribes guidelines for printing inks for use on food packages. The standard differentiates between four categories of printing inks and gives guidance on the formulation of the respective inks:

- 1) Printing inks on external (secondary) food packaging. They can be formulated freely, but must not contain substances from the exclusion list.



- 2) Printing inks on direct food packaging (immediate food wrappings). Those must be applied to the outside of the food wrapper, comply with the exclusion list and must not contain toxic substances. Inks are to be printed in such a manner as to avoid set-off.
- 3) Printing inks for direct food contact. They must be formulated only with food additives.
- 4) Printing inks for disposables (e.g. paper plates, drinking straws, or table napkins). Those must not contain substances from the exclusion list and they shall be formulated to avoid bleeding onto food. The exclusion list in Annex A comprises pigments and compounds based on antimony, arsenic, cadmium, chromium (VI), lead, mercury and selenium as well as several dye colorants, solvents, plasticizers and other compounds (e.g. dioxines, nitrosamines and others). It is less demanding than the JPIMA and EuPIA exclusion lists – in particular, toxic phthalate ester plasticizers usable in solvent-based inks are not banned. With regard to converter's obligations, in the case of immediate food wrappings, printing inks must be applied only on the outside of the wrapper, and are to be printed in such a manner as to avoid set-off.

Finally, IS 15495, No. 5.4 requires: *“where the nature of the food packaging is such that migration or bleeding from dyes or other soluble coloring agents is likely to occur, printing inks shall not be formulated with such coloring agents”*.

SUMMARY

All inks supplied by Siegwirk for food packaging applications are formulated in such a way that the applicable Indian Standard IS 15495 are met with the presence of suitable barrier layers. In many cases, the internal Siegwirk limits and restrictions are even a lot stricter to offer compliant inks with the benefit of even more safety for our customers and the consumers!