



CANADIAN PRINTING INK MANUFACTURERS ASSOCIATION

STATEMENT ON PRINTING INKS AND FOOD PACKAGING

Members of the C.P.I.M.A. regularly receive inquiries about the suitability of a variety of ink types for food packaging applications. The purpose of this statement is to clarify many of the issues that arise, including those concerning four North American agencies that have regulations affecting the use of printing inks for food packaging applications.

In Canada, both Health Canada (Bureau of Chemical Safety) and the Canadian Food Inspection Agency (CFIA) deal with food packaging issues. Health Canada sets standards and evaluates food packaging with respect to the standard. CFIA enforces packaging requirements with respect to federally regulated packaging facilities.

The regulatory body in the United States is the Food and Drug Administration (F.D.A.). ***The F.D.A. does not approve specific products (i.e. printing inks) for direct or indirect contact with food.*** Their sole concern is with materials that may become, either by default or design, food additives. They rely on properly designed extraction studies or expert testimony when determining the food additive status of a printing ink.

The other agency in the United States is the Department of Agriculture (U.S.D.A.) The U.S.D.A. regulates the packaging materials used primarily for meat and poultry products. The U.S.D.A. stresses that the responsibility for providing guarantees to food packers rests with the converters who provide the finished packaging material. If direct contact between the foodstuff and the printing ink is intended, then the U.S.D.A. follows the same food additive regulations as the F.D.A.

From the onset, it is essential to distinguish between package designs where the ink is intended to come into direct food contact and those where direct food contact between the printing ink film and the foodstuff is neither intended nor expected. An example of inks with no direct food contact is the printing on plastic tubs for yogurt and margarine.

DIRECT FOOD CONTACT

Although it is not mandatory, food packaging companies may wish to obtain an *opinion* from Health Canada on the suitability of a package for a specific application, in the form of a "*Letter of Non-objection*". Health Canada evaluates the entire package design, including all materials used, manufacturing process, type of food to be packaged and how it will be stored and processed for use. If information on the composition of inks used is required, the packager must provide the Health Canada project reference number to the ink supplier who will then submit the information directly to Health Canada. The whole process can take 6 months to 2+ years. It should also be noted that assessments are done for packaging only. Single service items like paper plates, cups, napkins plastic utensils, etc. are not included as packaging materials.

A letter of non-objection does not absolve the packager from liability should there be a failure in package design leading to the contamination of the food product.

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CFIA only deals with food packaging materials used in federally registered food establishments, such as packagers of fish, meat, poultry and dairy products. CFIA's mandate is to evaluate the **finished packaging material**, not to evaluate individual components. As a result, the procedure would be the same as described above for Health Canada. It is the responsibility of the finished packaging material manufacturer to submit a complete package for approval.

NO DIRECT FOOD CONTACT

No direct food contact means that the printed ink film and foodstuff do not physically contact each other and there is no migration of ink components from the printed film to the foodstuff.

When the following recommendations are met there is no expectation that any ink components will enter the food, thus meeting the requirements as far as the ink is concerned:

1. *The package design must incorporate a continuous functional (impermeable) barrier between the foodstuff and the final ink film;*
2. *The converter must ensure that the inks are properly and completely dried or cured after printing, such that the print does not set-off or mark during the stacking or nesting of the packages prior to filling with food.*

The functional barrier concept for "no direct food contact" is also recognized by the F.D.A. and the U.S.D.A.

OTHER FACTORS – ODOUR AND TAIN

The issue of "direct food contact" and "no direct food contact" of printing ink for food packaging applications refers to the *toxicological* properties of a printing ink. Of equal importance in some applications, are the odour and taint properties of the printing ink being used. There is not necessarily any direct relationship between toxicological, odour and taint properties. The latter should be determined independently for a given package design and product.

CONCLUSION

In summary, when used as recommended, printing inks are suitable for use on food packaging. Health Canada opinions on specific packaging are optional. CFIA approval for federally registered establishments is required but applies to the finished packaging. ***The C.P.I.M.A. does not recommend printing inks for direct contact with food.***

CANADIAN GOVERNMENT WEBSITES

CFIA > Packaging Materials

<http://www.inspection.gc.ca/english/fssa/reference/refere.shtml>

Health Canada > Food Packaging

<http://www.hc-sc.gc.ca/fn-an/securit/packag-emball/index-eng.php>

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C.P.I.M.A.