Risk Management of Food Contact Materials and Articles

Summary
Crown and our supply chain ensure that, though the use of expert risk assessment and management, any raw materials used do not present a risk from the finished article to consumers. We constantly monitor the status of raw materials such that any emerging concerns can be safely and efficiently dealt with through substitution, re-formulation or refined risk assessment allowing us to offer customers choice with respect to product performance and substance use.

Background
Crown Holdings manufactures a wide range of coated metal food\(^1\) contact articles using a significant number of bought-in materials such as metal, coatings, inks, sealants etc. Coated metal packaging (cans, ends and closures) which represents the largest part of Crown’s product range provides some very important consumer benefits in terms of safe, long term, ambient temperature storage of food. Long and stable shelf life allows year-long provision of seasonal foods and balancing out of good and poor crop/catch years with the consequential benefits in terms of food security and minimization of food wastage.

The physical integrity of the finished packaging is essential to the long term safety and effectiveness of coated metal packaging. The food contact coatings, sealants and gaskets used to make coated metal packaging have complex and demanding specification requirements which limit the types of materials that can be used. Crown manages the materials that we use through a comprehensive material data base that includes qualification data, key compositional information along with safety data sheets, declarations of compliance and other regulatory compliance statements covering food contact, CLP and environmental requirements. This information allows Crown’s risk assessment experts to ensure the safety and compliance of our finished product.

Among the key principles in selecting and using raw materials are:-
- Occupational Safety – safe for our employees to use
- Product Safety – safe for our customers, and consumers to use and handle
- Food Contact Safety – safe packaged food and drink for consumers
- Environmentally safety
- Sustainability of our products
- Customer requirements regarding substance use and product performance

This document focusses on Occupational safety and Food Contact safety

Occupational safety
Detailed legislation exists both for the classification and labelling of products and the registration, evaluation and control of chemicals including detailed safety data sheets. Crown fully abides by the requirements and spirit of these measures to ensure that our workforce is fully safe and protected. Over and above the statutory requirements, Crown has a policy to prevent employee exposure to products classified as Carcinogenic, Mutagenic and toxic for Reproduction (CMRs) whereby suppliers must not deliver materials classified as CMR 1a, 1b, or 2 without express written agreement which would only be provided after rigorous specific risk assessment by regional management. This requirement is enshrined in a Technical Cahier des Charges document.

\(^{1}\) In line with convention and with food contact legislative definitions, throughout this document, food refers to both food and drink
**Food Contact Safety**

Food contact materials used by Crown to manufacture coated metal packaging are covered by legislative requirements (FDA CFR in USA; the Framework, GMP, and substance specific Regulations in the EU) that ensure the consumer safety of food packed in contact with our products. Food contact materials are manufactured only using monomers and additives that are specifically included in relevant positive lists and have been evaluated for food contact applications by a competent authority. These evaluations are based on risk assessments using the intrinsic hazard data for the substances together with consumer exposure assessment, migration assessment and the development and application of appropriate risk management measures which are communicated down the supply chain through Declarations of Compliance. This risk assessment based approach is used for food contact materials and articles because the particular sensitivity of potential contamination of food requires a more rigorous targeted approach than the relatively simplistic hazard based approach that is used for the general assessment of chemicals. The risk assessment and management based approach allows for more stringent substance assessment whilst also enabling the safe use of essential raw materials that contribute to the significant benefits that coated metal packaging provides.

**Substances of Concern**

Crown maintains a watch on the status of the ingredients of the bought in materials that we use through a regular review of lists such as the EU Candidate list of SVHC, and lists compiled by third parties such as ChemSec or Food Packaging Forum. Crown is also closely involved in Industry and Joint Industry Associations playing an influential role in relevant groups. Through these activities Crown is able to identify substances of emerging concern and either initiate work programs to reduce reliance on the chemical of concern or work with the supply chain to demonstrate that the identified hazards are sufficiently ameliorated by the specified risk management measures to ensure workforce and consumer safety.

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