

LCR Hallcrest Permanent Change Pigments and Coatings (Kromagen Inks and Concentrates)

REACH REGULATIONS

As part of our ongoing commitment in ensuring that we comply with all legislative requirement, we have implemented the full requirements listed under the REACH Directive and the substances listed under SVHC.

We can confirm to our customers that TMC Hallcrest have pre-registered the substances that we import appropriate quantities of ourselves and come under the REACH Directive. All suppliers of other chemicals were contacted and informed of our use description. In terms of the SVHC list, we are also happy to confirm that all our products made by TMC do not contain any chemicals listed in SVHC as per 17th December 2015 updates:

<http://echa.europa.eu/candidate-list-table/>

Chemical Registration Inventories.

We can confirm all components comply with EINECS, TSCA, DSL / NDSL and many other national chemical registers.

RoHS , WEE

Kromagen products comply with these regulations. Specimen batches have been independently tested and verified but individual batches are not routinely tested.

DIN EN 71-3:2014-12 Safety of Toys - Migration of certain 19 elements (heavy metals in toys). As we have independent verification that Kromagen does not contain levels of the listed metals that would exceed the EN71 limits it is safe to say there should not be a problem but the actual regulation refers to extraction from the final end product or toy itself. If some one is going to make toys we can say the ppm amounts of metals in Kromagen should not lead to the toy failing any tests for EN71 but it is the final product that would require certification.

The Council of Europe Resolution AP (89) 1 is concerned with the use of Colourants coming into contact with food.

The pigments should not migrate into food (as actual colour) and a test method involving putting the pigments on filter paper and testing with various solutions. The tests are all on the colourant in contrast to EN71 where the end product is tested. Kromagen products are not suitable for food contact printing. Kromagen would comply with AP89 in regard to the heavy metal content and freedom of harmful chemicals listed.

DIRECT AND INDIRECT FOOD CONTACT INKS

Direct food Contact:

Kromagen products are not suitable for use in direct food contact inks.

Indirect food Contact:

Kromagen products are manufactured under BS EN ISO 9001:2008 and as such meets the Good Manufacturing Practices for The Production of Packaging Inks manufactured for the non-food contact surfaces (indirect food contact) of food packaging and articles intended to come into contact with food.

Kromagen inks and raw materials manufactured by TMC do not contain any chemicals on the CEPE forbidden chemicals. Not all chemicals used in Kromagen are on the Swiss list - Annex 6 of the Ordinance of the FDHA on articles and materials of 23 November 2005.

It is the responsibility of the printer / product manufacturer to ensure there is no migration through the packaging and allowing contamination of the food. If a Kromagen print is to be heated on the packaging this could lead to migration so any testing should take this into account.

US PDS080 Rev00

hallcrest.com, Glenview IL, US tmchallcrest.com, Connah's Quay Flintshire UK +44 (0) 1244 817107 **Revised September 8th 2015**

The information contained is given in good faith All testing and comments are based on batches typical of standard products. It should be note that new products or specific custom formulations may vary in their status and for these products TMC should be contacted directly to ascertain if there is any deviation from this document.