

Subject: Safety of Toys Issued: May 2016

New EU Toy Safety Directive 2009/48/EC

Directive 2009/48/EC of the European Parliament and of the Council of 18 June 2009 on the Safety of Toys, which replaces the older Directive 88/378/EEC. Since then member states have amended national laws to comply with the new directive. From 20 July 2013 on, all toys marketed in the EU must comply with the new requirements.

The revised directive focuses on enhanced safety requirements for toys, particularly with regard to the presence of chemicals. Substances classified as carcinogenic, mutagenic or toxic for reproduction (CMR) o catergory 1A, 1B or 2 under Regulation (EC) 1272/2008 shall not be used. The use of certain allergenic fragrances is restricted, and new limits for the migration of 19 metallic elements from toys have been set. The Commission has given the mandate to European Committee for Standardization (CEN) to adapt EN 71 to the new requirements by 2013. The revised and harmonized standard EN 71-3 has been published on 29 June 2013 and amended in December 2014.

The migration limits set by the new directive apply when it is used as intended or in a foreseeable way, unless the toy or component clearly excludes any hazard due to sucking, licking, swallowing, or prolonged contact with skin. Packaging materials – unless having an intended play value – are also excluded.

Apart from the excluded materials, other elements now included in the Directive may be present in inks, notably copper, zinc and aluminium (which forms the basis for certain blue, green, and metallic inks), or cobalt and manganese (which may be present as driers in oxidative drying sheet-fed litho inks).

European Standard EN 71 "Safety of Toys"

This new version of EN 71 - Part 3 sets the requirements and the test methods for the migration of 19 elements from toys materials and from parts of toys.

Printing inks and varnishes are not toys in themselves. Rules for printed products are specified in section 7.3.3.3. Packaging for toys is not in scope. Compliance with the migration limits must be determined by testing the scraped-off ink and/or varnish layer or, if it is not possible to scrape off this layer (e.g. in the case of paper and board), by testing the printed toy material. The category III migration (for scraped-off toy materials) apply.

As toner (ink) supplier, Xeikon cannot take responsibility for the handling and use of its products outside its own operations. As EN 71-3 relates to the properties of the finished toy, not the toner/ink as supplied to the printer, it is the responsibility of the toy manufacturer to demonstrate the compliance of the finished toy.

Further, parts of EN 71 (parts 9-11) which deal with the risks from organic chemicals have not yet been adopted by the European Commission. In any case, printing inks as well as printing ink films would not be in

scope of these standards, as exposure to organic chemicals from coatings below 500 μ m thickness is not regarded as relevant in the current version of EN 71-9/10/11. Therefore information on organic chemicals is not provided by Xeikon.

Migration analysis

Xeikon toner samples of QA-P (CMYK), QA-I (CMYK) and QA SPOT (ORGBWCIXm) were tested according to the migration protocol described in EN 71-3. The tests were performed at a certified third party laboratory. More details on the analysis are available on request.

This is to confirm that the heavy metal content of Xeikon toners (QA-P, QA-I and QA SPOT), and by extension on grounds of similar composition (FA, QA-IC, QA-CH, QA-CD and SPOT colours) is well below the limits as defined in EN 71-3.

Dr. Lode Deprez

Vice President R&D Consumables and Process Group

Xeikon Manufacturing NV, Duwijckstraat 17 - 2500 Lier - Belgium