



## Safety of toys: many rules to be aware of

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*Over the past year there has been much focus on the new Toy Safety Directive. Most of the new requirements came into force on 20 July 2011 and the new chemical requirements will come into force in two years time. However, there are several other important pieces of legislation that apply to toys even though they do not specifically address toys. Experts use many acronyms (RoHS, REACH, CLP, EMC, R&TTE, etc.), which may be difficult to understand for those who are not familiar with them.*

*This article helps explain more about these less familiar but important requirements affecting toy safety.*

### Standards supporting the requirements of the new Directive

There are several safety standards (e.g. EN 71 series) that interpret the new Directive's safety requirements on e.g. mechanical and physical properties, flammability, and electrical properties of toys. With regard to chemical properties, the existing safety standards are under revision so that they will reflect certain new chemical requirements of the Directive that come into force on 20 July 2013.

In many cases, it is sufficient that manufacturers use these safety standards together with a safety assessment, to determine whether their toy meets the requirements of the Directive. But there are other regulations that apply to toys (some of which are referred to in the Toy Safety Directive) and must be taken into account in order to meet all safety, health and environmental requirements for toys. There are several examples for chemicals in toys and for electric toys.

### Rules applicable to chemical properties

The most complex requirements of the new Toy Safety Directive (2009/48/EC) are probably those on chemical properties. The Directive says for example (simplified):

- Toys must be in compliance with **other relevant EU legislation**
- Substances classified as carcinogenic, mutagenic or toxic to reproduction (**CMRs**) should not be used in toys, except under limited circumstances.
- **Cosmetic toys** must comply with the Cosmetics Directive

We will take a closer look at the highlighted phrases:

### Other relevant EU legislation

Examples of other relevant legislation toy are:

#### **REACH** (Registration, Evaluation, Authorisation and Restriction of **C**hemicals)

REACH, Regulation (1907/2006), contains an Annex (XVII) where restrictions/limits for certain substances are listed. This is where you find the limits and rules for benzene, nickel, phthalates, azo dyes, cadmium, etc. The limits also apply for toys, but some limits apply only under certain conditions. For nickel and azo dyes for example, the limits apply only for toys that may come into prolonged contact with the skin. For some phthalates, the limits only apply if the toy can be placed in the mouth.

## **RoHS (Restriction of the use of Hazardous Substances in Electrical and Electronic Equipment)**

RoHS, Directive (2002/95/EC), sets limits and rules for certain heavy metals and flame retardants in electrical and electronic products (lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBBs) and polybrominated diphenyl ethers (PBDEs)). The limits apply to all parts of electrical and electronic toys (i.e. not only the electronic part). The requirements are primarily based on environmental aspects.

## CMRs

There are some exceptions to the prohibition of CMR substances. Firstly, they are not prohibited if the substances are not accessible during foreseeable use. Secondly, they may be present in concentrations below limits specified in the so-called CLP Regulation 1272/2008 (Classification, Labelling and Packaging of Substances and mixtures). In CLP Annex VI, Table 3.1 indicates hazard classes for a wide range of substances and mixtures. You can consult this table to find out if a substance is classified as a CMR and what category it falls into: 1A, 1B or 2. There is a maximum allowed concentration in toys for each of these classes and categories of CMRs.

Exceptions are also made for toy material that meets the requirements of FCM Directive 2002/72/EC (Food Contact Materials).

## Cosmetic toys

Cosmetic toys must meet the requirements of the Cosmetics Directive 76/768/EEC, which includes specific labelling requirements and requirements for safety assessment on human health.

## **Rules applicable to electrical properties**

Electric toys are often covered not only by the Toy Safety Directive and the RoHS Directive but also by the EMC Directive 2004/108/EC (Electromagnetic Compatibility), which sets requirements for electromagnetic interference.

Transformers for toys are also covered by the LVD Directive 2006/95/EC (Electrical Equipment Designed for use Within Certain Voltage Limits, or 'Low Voltage Directive'), which lays down requirements for electrical safety e.g. for equipment connected to the mains.

The R&TTE Directive 1999/5/EC (Radio Equipment and Telecommunications Terminal Equipment) contains specific requirements applicable to e.g. radio-controlled toys.

Batteries in toys must meet the requirements of the Batteries Directive 2006/66/EC, which includes limits for certain substances and labelling rules for batteries.

**Note: The text above contains only examples of legislation for toys and it is not comprehensive.**

## **About TIE**

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