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XLVII. Toys Made from Plastics and other Polymers, and from Paper and Paperboard

As of 01.01.2003

This Recommendation applies to toys that are intended to be placed in the mouth, as well as to toys for children under 36 months of age, which experience shows can be expected to put them in their mouth. The statutory regulations and standards applicable to toys are listed in Annex I. This Recommendation is meant to serve precautionary consumer protection; it is not a statutory standard. In accordance with current knowledge, it may be assumed that compliance with this Recommendation will ensure that, in respect to the substances used in its manufacture, under normal or expected conditions of use, the toy will present no danger to health.

It is recommended that the following be taken into account:

Plastics and other polymers, paper and paperboard, used in the manufacture of toys should comply with the requirements laid down for food-contact commodities (see Annex II, Conditions for testing migration limits corresponding to Annex III¹).

- In addition, for toys made of plasticized plastics, the plasticizers used should be those which have been approved for food-contact plastics by the Scientific Committee for Food of the European Commission.

The possibility of pieces of toy being swallowed should be prevented by observing the requirements relating to pieces of toy being bitten off and/or swallowed in amended EN 71 "Safety of toys - Part 1: Mechanical and physical properties".

- Organo-tin stabilisers should not be used in the manufacture of toys from plasticized PVC in the sense of this Recommendation.
- Volatile residues, such as solvents, should be removed as far as is possible from the finished toy.
- From the intended or predictable use of toys in the sense of this Recommendation there should be no transfer to the skin or mucous membranes of colorants or optical brighteners (testing in accordance with Annex IV).

Azo dyes that through cleavage of one or more azo groups can produce one of the amines listed in Annex V should not be used to colour or decorate the toys.

¹ For teething rings and toy animals made of plasticized PVC other testing conditions are applied. For corresponding instructions see: <http://cpf.jrc.it/toys>.

Annex I: Statutory regulations and standards for toys

Food and Feed Code (Lebensmittel- und Futtermittelgesetzbuch)
Commodities Regulation (Bedarfsgegenständeverordnung)
Regulation on the Safety of Toys (Verordnung über die Sicherheit von Spielzeug)
DIN EN 71 Safety of toys

- Part 1 Mechanical and physical properties
- Part 2 Flammability of toys
- Part 3 Migration of certain elements
- Part 4 Experimental sets for chemistry and related activities
- Part 5 Chemical toys (sets) other than experimental sets
- Part 6 Graphical symbol for age warning labelling
- Part 7 Finger paints, requirements and test methods

Annex II: Requirements for food-contact commodities

Regulation 1935/2004/EG on materials and articles intended to come into contact with Food
Food and Feed Code (Lebensmittel- und Futtermittelgesetzbuch)
Commodities Regulation (Bedarfsgegenständeverordnung)
Commission Regulation (EU) No 10/2011
Recommendations of the Federal Institute for Risk Assessment (Bundesinstitut für Risikobewertung - BfR) on the evaluation of plastics and other polymers, as well as paper and paperboard in relation to health within the framework of the Food and Feed Code, but excluding Recommendation IX "Colorants for colouring plastics".

Annex III: Requirements for testing migration limits

Testing is conducted with contact over a period of one hour at 40 °C using distilled water as test medium. For toys in the form of teething rings, the test period is extended to 24 hours.

Annex IV: Testing for the transfer of colorants and optical brighteners (fastness to saliva and sweat)

Testing for fastness to saliva and sweat is conducted according to DIN 53 160-1 and 53 160-2; a value of 5 on the grey scale rating after DIN EN 20105-A03 should be reached. The transfer of optical brighteners is tested in accordance with DIN EN 648, with which a value of 5 should be reached.

Annex V: List of amines²

Amine	CAS-Nr
4-amino-biphenyl	00092-67-1
benzidine	00092-87-5
4-chloro-o-toluidine	00095-69-2
2-naphthylamine	00091-59-8
o-aminoazo-toluene	00097-56-3
2-Amino-4-nitro-toluene	00099-55-8
p-chloro-aniline	00106-47-8
2,4-diamino-anisole	00615-05-4
4,4'-diamino-diphenyl methane	00101-77-9
3,3'-dichloro-benzidine	00091-94-1
3,3'-dimethoxy-benzidine	00119-90-4
3,3'-dimethyl-benzidine	00119-93-7
3,3'-dimethyl-4,4'-diamino-diphenyl methane	00838-88-0
p-cresidine	00120-71-8
4,4'-methylene-bis(2-chloro-aniline)	00101-14-4
4,4' -oxy-dianiline	00101-80-4
4,4' -thio-dianiline	00139-65-1
o-toluidine	00095-53-4
2,4-toluylene diamine	00095-80-7
2,4,5-trimethyl aniline	00137-17-7
o-Anisidine	00090-04-0
4-Amino-azobenzene	00060-09-3

² acc. to Directive 2002/61/EC amending for the nineteenth time Council Directive 76/769/EEC relating to restrictions on the marketing and use of certain dangerous substances and preparations (azocolourants)