

LVD ADCO

Recommendation

November 2008

Regarding Child-Appealing Household Appliances

Member States market surveillance authorities have noticed an increasing number of products shaped and/or decorated so as to be appealing to children appearing on the community market. This has led to questions amongst market surveillance authorities as to how to deal with such products while attempting to provide a uniform treatment across the community market.

At the 22nd meeting of the LVD Administrative Cooperation working group (ADCO) held in London on September the 10th – 11th 2008, Member States' Authorities agreed to the setting up of a working group to produce an Recommendation.

The Recommendation is intended to assist economic operators in understanding how such products should be expected to be viewed by market surveillance authorities

The Recommendation is within the framework of the current Directive and as such does not represent any change in either the Directive or in any implementing National Legislation.

I. INTRODUCTION

1. This Recommendation is based on Directive 2006/95/EC relating to electrical equipment designed for use within certain voltage limits ¹ (LVD). It refers to the application of Articles 1, 2, 5 and 9 of the aforementioned Directive.
2. This Recommendation relates to problems identified regarding child-appealing household appliances ².
3. The Commission has been formally notified by Member States of measures taken restricting the placing on the market of child-appealing household appliances using the safeguard procedure described in the LVD. In general, the household appliances subject to these measures have had a rated voltage exceeding 24 V. The present Recommendation seeks to clarify the application of the LVD to these products with respect to not only the risk of electrical shock but also to any other relevant and associated risks related to its potential attraction to children.
4. The question as to whether a child-appealing household appliance is considered as "child appealing" depends on a case-by-case assessment of the child appealing character of the product, taking into account the specific characteristics of the product in question. The characteristics should include, without being limited to, the following :
 - i) shape
 - ii) decoration
 - iii) colours (e.g. bright and contrasting colours)
 - iv) texture
 - v) smell
 - vi) sound
 - vii) movement
 - viii) function

¹ OJEU No L 374, of 27.12.2006, p 10-19.

² The European standard EN 60335-1 "Household and similar electrical appliances - Safety - Part 1: General requirements" excludes under chapter 22.44 child-appealing household appliances from its scope.

II. SAFETY RELEVANT REQUIREMENTS OF CHILD-APPEALING HOUSEHOLD APPLIANCES

5. There are basically two configurations of power supply to a child-appealing household appliance to be considered:
- a. via a cable with electrical supply direct from the socket outlet (nominal supply voltage from domestic outlets is 230 V for alternating current according to the European standard HD 472 S1:1989 and HD 472 S1:1989/A1:1995)³; or
 - b. via a cable supplied by less than 24 V, which is generally supplied by a transformer, usually forming an assembly so that it may be plugged via the transformer into the 230 V outlet. The transformer and cable are both provided with the household appliances.

Article 1 of the LVD specifies that the Directive covers electrical equipment designed for use with a voltage rating of between 50 V and 1 000 V for alternating current.

6. Hence, the LVD covers:
- a. the household appliance of the first configuration (see 5.a),
 - b. only the transformer of the second configuration (see 5.b) when the household appliance and the transformer are not permanently connected, and
 - c. both the transformer and the household appliance of the second configuration (see 5.b) where the transformer and the household appliance are permanently connected.
7. This Recommendation only relates to the child-appealing household appliances as referred to in clauses 6.a and 6.c.
8. Article 2, paragraph 2 of the LVD contains a reference to a list of principal elements of the safety objectives in Annex I of the LVD.

Points 2 and 3 of Annex I, list the principal elements of the safety objectives concerning protection against hazards:

- a) Point 2 describes the elements of the safety objectives that are related to the protection against hazards arising from the electrical equipment.
- b) Point 3 describes the elements of the safety objectives that are related to the protection against hazards which may be caused by external influences on the electrical equipment.

³ The European standard HD 472 S1 “Nominal voltages for low voltage public electricity supply systems” establish the voltage limit for domestic appliances in Europe.

9. Products designed or clearly intended for play by children of less than 14 years of age, are toys covered by Council Directive 88/378/EEC on the safety of toys⁴. All other child-appealing appliances are covered by the LVD if they fall within the scope of this Directive.

During normal use, household appliances can be easily moved from one place to another whilst still connected to the electricity supply. It is considered that, due to the child-appealing character of the household appliance, children might be induced or encouraged to touch, explore and experiment, and move such products although they are not designed or clearly intended to be handled or used by children or to be played with like toys. A foreseeable misuse or hazard of the household appliance might occur when children handle or use such household appliances. This in turn may lead to direct access to hazardous parts. Moreover, certain characteristics of the child appealing household appliance may induce children to touch hazardous parts; consequently, even if the children are not playing with the appliance, there may be risks to be considered.

10. In order to meet the requirements of the LVD (see point 8.), the manufacturer needs to perform a risk assessment to ensure that the risk of injury which is associated with the foreseeable handling, use or misuse of the household appliance, encouraged by the child-appealing character of the product, where this is placed in an domestic environment where children are present, is taken into account and eliminated.
11. It is important to note that, for items intended to be played with by children (toys), a voltage limit of 24 V has been introduced to the Toys Directive in order to reduce the risk of electrical shock.
12. On the basis of the aforementioned risk assessment, the manufacturer needs to take measures to ensure that the risk of injury due to access to hazardous parts, associated with the foreseeable access to and potential handling, use or misuse of the child-appealing household appliance, is adequately addressed.

III. ASSESSMENT OF THE SAFETY OF CHILD-APPEALING HOUSEHOLD APPLIANCES

13. When establishing compliance of electrical child appealing household appliances with the provisions of the LVD, manufacturers have to address all risks, including but not limited to: hot surface temperatures, access to live and moving parts, electric shock, potential energy in form of a build up pressure, hot liquid and mechanical overload. CENELEC Guide 29 "Temperatures of hot surfaces" provides guidance on how to perform the risk assessment related to hot surface temperatures – in particular it should be noted that the duration of the touch period is longer for children compared to adults.

⁴ Directive 88/378/EEC of 3 May 1988 on the approximation of the laws of the Member States concerning the safety of toys (Toys Directive). Article 1 of the Directive defines toys as “any product or material designed or clearly intended for use in play by children of less than 14 years of age.”

- 14 The analysis needs to address all risks to which a child may be exposed, for example, in cases where the child-appealing household appliance has functional hot surfaces, contains a hot liquid or a build up of pressure. CENELEC Guide 29 only applies to non-functional surfaces, but the temperature limits can be used as an indication of which temperatures are acceptable for children to touch especially when these temperatures correspond to surfaces decorated or shaped with child appealing figures. Functional parts must be guarded in a way that children cannot touch them.

IV BEST PRACTICE FOR THE MANUFACTURER

15. Best practice should be followed during the design and manufacture of the products. This means that products should be designed in the following prioritised manner:
- a) a recognized hazard has to be eliminated to the extent possible;
 - b) if the risk cannot be eliminated it has to be reduced to the extent possible by the application of safeguarding and complementary protective measures;

After taking relevant safety measures, where risks remain because the methods under a) and b) could not be followed within the requirements of the LVD, then appropriate and clear warnings and labelling should be clearly given on the product, and in the instructions for use respectively, taking into account that some markings may not be understood by children who could have access to, and touch, explore and experiment or handle the product. Given the high level of protection required, it should be noted that there may be circumstances where a risk may be so high that labelling would be insufficient to meet the principal elements of the safety objectives and the product would not then be allowed onto the Community market.

Sometimes a product may not be able to meet the requirements mentioned above. This would be the case, if, for instance, a product needed careful handling by an adult because a residual risk cannot be removed; e.g. as a result of the function of a product. Obviously in such a case it would be necessary to decide that the product may not have any added child-appealing features.

V. DOCUMENTATION

16. Where the risk assessment leads to the introduction of safety measures to reduce the relevant risks, then this should be described in the technical documentation. The Directive requires that the documentation includes information on the risk analysis together with an evaluation of the solution in order to demonstrate that the principal elements of the safety objectives have been met. The technical documentation should also include the assessment of the child appealing character of the product.

The recommendations are based on already existing basic principal elements and it is therefore obvious to apply the recommendations of this declaration.

Member States' Authorities agreed to take account of this Recommendation in the context of market surveillance.