



Fraunhofer Institut
Zuverlässigkeit und
Mikrointegration

Adaptation to scientific and technical progress under Directive 2002/95/EC

Final report

Freiburg, 20 February 2009

Öko-Institut e.V.

Dipl.-Ing. Carl-Otto Wensch
Dipl.-Ing. Stephanie Zangl
Dipl.-Geoök. Rita Groß
Dipl.-Biol. Anna K. Weber

Fraunhofer IZM

Dr.-Ing. Otmar Deubzer

Öko-Institut e.V.

Freiburg Head Office

P.O. Box 50 02 40
79028 Freiburg, Germany

Street Address

Merzhauser Str. 173
79100 Freiburg, Germany
Tel. +49 (0) 761 – 4 52 95-0
Fax +49 (0) 761 – 4 52 95-88

Darmstadt Office

Rheinstr. 95
64295 Darmstadt, Deutschland
Tel. +49 (0) 6151 – 81 91-0
Fax +49 (0) 6151 – 81 91-33

Berlin Office

Novalisstr. 10
10115 Berlin, Deutschland
Tel. +49 (0) 30 – 28 04 86-80
Fax +49 (0) 30 – 28 04 86-88

The views expressed in this final report are the sole responsibility of the authors and do not necessarily reflect the views of the European Commission.

The recommendations given by the authors should not be interpreted as a political or legal signal that the Commission intends to take a given action.

article 5 (1) (b) have become obsolete. It is therefore recommended to repeal this exemption without a transition period.

4.35 Exemption No. 29

“Lead bound in crystal glass as defined in Annex I (Categories 1, 2, 3 and 4) of Council Directive 69/493/EEC”

This exemption had originally been reviewed by the contractor in 2006 [1]. By that time the recommendation had been not to grant the exemption since there were no grounds that could be based on Article 5 (1) (b).

An add-on to this recommendation [2] made clear that the applicant and the contractor had opposing views:

“Upon request of the applicant, the consultant re-opened the dialogue on the recommendation given in monthly report n°3. It was agreed that the consultant would write an add-on to the existing text in report n°3 in order to better reflect the applicant’s opposite view to the given recommendation.

In contrary to the consultant, the applicant argues that the functionality of a product (=electrical equipment) is NOT limited to the elementary technical function, e.g. the functionality of a chandelier is not only to spend light via the use of electricity but mainly to beautify and grace the room by the brilliancy of the crystals. Both aspects of functionality form an integral part of the product. Even if such an application could be realised with lead-, cadmium- and chromium-free alternatives, its whole functionality – according to the applicant – would not be given, since the quality of the application is directly linked to the optical and decorative properties of the crystal. The applicant states that substituting the crystals with RoHS-compliant ones would lead to a degradation in quality and thus not fulfil the needed requirements of a substitute.

A further example cited by the applicant is that a watch decorated with red crystals cannot be substituted with RoHS-compliant red crystals without crucial decrease in colour purity. This, he argues, does not fall under the term “substitution”. Substitution implies equivalency.

Article 5 (1) (b) leaves room for interpretation concerning the definition of what exactly can be understood by “technically/scientifically practicable”. The consultant and the applicant have diverging views on its interpretation.”

Since 2006 the situation has not changed. In the meantime the Commission has published exemption 29 on the use of lead in crystal glass justifying it the following way [3]:

“Crystal glass has been progressively used for decorative purposes on electrical and electronic equipment. Since Council Directive 69/493/EEC of 15 December 1969 on the approximation of the laws of the Member States relating to crystal glass (2) prescribes the amount of lead to be present in crystal glass and the substitution of lead in crystal glass is therefore technically impracticable, the use of this hazardous substance in specific materials and components covered by that Directive is unavoidable. Those materials and components should be therefore exempted from the prohibition.”

4.35.1 Recommendation

In the stakeholder consultation no information related to this exemption was obtained. Since the justification given in [3] is assumed to be legally correct and thus still valid, it is recommended to further grant the exemption.

4.35.2 Expiry date

As it can currently not be foreseen when substitutes will be available respectively when the grounds for the justification of the exemption will not be valid anymore, it is recommended to set the expiry date at the time of the next revision – namely 31. July 2014.

4.35.3 References

- [1] Gensch et al. 2005; Adaptation to scientific and technical progress under Directive 2002/95/EC. Monthly report 3, final version. Freiburg, 21 November 2005
- [2] Gensch et al. 2005; Adaptation to scientific and technical progress under Directive 2002/95/EC. Final report. Freiburg, 28 July 2006
- [3] Commission Decision of 12 October 2006 amending for the purpose of adapting to technical progress, the Annex to Directive 2002/95/EC of the European Parliament and of the Council as regards exemptions for applications of lead in crystal glass (2006/690/EC); OJ L 283/47