EUROPEAN COMMISSION
DIRECTORATE-GENERAL
ENVIRONMENT
ENV.G - Sustainable Development & Integration
ENV.G.4 - Sustainable Production & Consumption
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DIRECTIVE 2002/95/EC ON THE RESTRICTION OF THE USE OF CERTAIN HAZARDOUS SUBSTANCES IN ELECTRICAL AND ELECTRONIC EQUIPMENT (RoHS).

CHECK LIST FOR REQUESTS FOR ADDITIONAL EXEMPTIONS

Industry has sent to the Commission's services a number of requests for exemptions from the requirements of the RoHS Directive that are additional to those currently covered by the study and the stakeholder consultation. In most cases these are not substantiated by scientific and technical evidence. The proposed check-list will enable the Technical Adaptation Committee (TAC) to carry out a first screening of the requests received. Proposals that successfully pass the screening process will then be considered for a possible exemption.

Article 4(1) of Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment[1] provides 'that from 1 July 2006, new electrical and electronic equipment put on the market does not contain lead, mercury, cadmium, hexavalent chromium, PBB or PBDE.' The Annex to the Directive lists a limited number of applications of lead, mercury, cadmium and hexavalent chromium, which are exempted from the requirements of Article 4(1).

Adaptation to scientific and technical progress is provided for under Article 5 of the Directive. Pursuant to Article 5(1): "Any amendments which are necessary in order to adapt the Annex to scientific and technical progress for the following purposes shall be adopted in accordance with the procedure referred to in Article 7(2):"

Article 5(1)(b) allows the exempting of materials and components of electrical and electronic equipment from Article 4(1) if their elimination or substitution via design changes or materials and components which do not require any of the materials or substances referred to therein is technically or scientifically impracticable, or where the negative environmental, health and/or consumer safety impacts caused by substitution are likely to outweigh the environmental, health and/or consumer safety benefits thereof;

In order to allow the TAC to consider submissions for additional exemptions, the information in Table I should be provided as a first step. The request for submissions should fulfil the criteria of Article 5(1)(b). The information provided should be supported, as far as possible, with relevant technical and scientific evidence.

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[1] OJ L 37, 13.2.2003, p. 19

TABLE I – CHECK LIST

PROPOSALS FOR FURTHER EXEMPTIONS FROM THE REQUIREMENTS OF ARTICLE 4(1) OF DIRECTIVE 2002/95/EC FOR SPECIFIC APPLICATIONS OF LEAD, MERCURY, CADMIUM, HEXAVALENT CHROMIUM.

Criteria	Information Please provide supporting technical and scientific evidence
1. Please describe the material / component of the electrical and electronic equipment that contains the hazardous substance.	Glazed coating on ceramic body is made from, among others, metallic and/or semi-metallic oxides. This coating is obtained by kilning these oxides between 900 and 1100ºC. These ceramic glazes are used as water-proof and decorating coating, which, in this case, serves as lamp base as well as decorating purposes, in various ceramic articles.
Please indicate the type and quantity of the hazardous substance used in the homogenous material. Please indicate the quantity of the substance in absolute numbers and in percentage by weight in homogenous material.	Chemical compounds of Lead (oxides, carbonates, silicates), in frits and ceramic pigments. Cadmium and Hexavalent Chromium in ceramic pigments (oxides and silicates). It's only possible to express in percentage the amount of substance, not its quantity in absolute numbers. The presented percentages result from average compositions information provided by our suppliers. These percentages also depend on the colours (grading), and thickness of the glaze. Pb compounds: 0 to 30% (depending on the colour); Cd compounds: 0 to 1,4% (depending on the colour); Cr^{6+} compounds: 0 to 0,9% (depending on the colour);
Please indicate the functionality of the substance in the material of the equipment.	Pb compounds:acts as flux on the development of glazed coloured surfaces, promoting special design effects, and lowering its melting point, and pigment melting points as well. It's used to create metallic (silver and gold) like glazed surfaces in the ceramic process. Cd compounds: it is used in the development of live, bright reddish and orange colours. Cr^{6+} compounds: it is used in the development of dark, black colours.
Please also provide an estimate of the annual quantities of the hazardous substance used in this particular application.	Compounds containing Pb: about 2500 Kg/year; Compounds containing Cd: about 450 Kg/year; Compounds containing Cr VI: about 500 kg/year.

2. Please explain why the elimination or substitution of the hazardous substance via design changes or materials and components is currently technically or scientifically impracticable.	Although many efforts are being made across the world, in academic centres, and company labs, it has not yet been found a proper substitute to these materials in these applications, with the same or similar chemical and physical properties. These properties consist mainly on: lowering of the glaze melting points, along with colouring pigments, as a silicate glaze, obtaining smooth, glossy, bright colours and special effects. Design changes on the product make no difference as well. It is technically and scientifically impracticable, at this state of the art, as aforesaid by our glaze and colouring pigments suppliers, in the declarations attached.
3. Please indicate if the negative environmental, health and/or consumer safety impacts caused by substitution are likely to outweigh the environmental, health and/or consumer safety benefits. **If existing, please refer to relevant studies on negative impacts caused by substitution.**	There are no technically and scientifically available substitutes, as aforesaid in the declarations available.
4. Please indicate if feasible substitutes currently exist in an industrial and/or commercial scale. **Please indicate the possibilities and/or the status for the development of substitutes and indicate if these substitutes will be available by 1 July 2006 or at a later stage.**	Not available. Not available.
5. Please indicate if any current restrictions apply to such substitutes. **If yes, please quote the exact title of the appropriate legislation/regulation.**	Unknown data.
6. Please indicate the costs and benefits and advantages and disadvantages of such substitutes. **If existing, please refer to relevant studies on costs and benefits of such substitutes.**	Not available. Not available.

7. Please provide any other relevant information that would support your application for an additional exemption.	Glaze coatings, made from compounds that include Pb, Cr (VI), and Cd, are allowed to contact with food, as long as they meet 84/500/EC directive requirements. The same substances are used for non-tableware products, such as jars, ashtrays, candleholders, among other objects. These substances are used in crystal glass manufacture often in superior quantities and concentrations. In our line of work, the only difference between an ashtray and a base for a luminary, it´s the shape, since the materials, kilning temperatures, and other manufacturing procedures used to produce ashtrays or luminary bearers is mainly the same. Our non-tableware electrified product range, claims about 15% of the total non-tableware range, and indeed, presents sometimes, contents of hazardous substances above RoHS directive requirements. Although RoHS directive is very strict when it comes to electric and electronic components, regarding the aforesaid hazardous substances, and restricts its contents, as far as glazed coating luminary/lamp bearers is concerned, it allows however, the use of crystal glass bearers or enclosures. Crystal glass, as far as lead contents is concerned, has about 24 to 33% of its composition, and still it is exempt according to RoHS specific exemptions (Comission Decision of 12 October 2006, *notified under document number C(2006) 4789*). Our suppliers, such as *Ferro*, *Vitricer* and *Endeka*, all agree that there are no environmentally friendly alternatives at this state of the art, based on technical and scientific knowledge, as stated on the declarations attached to this document.

Critères	Informations Veuillez fournir les justificatifs techniques et fondements scientifiques
1. Veuillez décrire le matériel/composant de l'équipement électrique et électronique qui contient la substance dangereuse. Veuillez indiquer le type et la quantité de la substance dangereuse utilisée dans le matériel homogène. Veuillez indiquer les quantités de substance en nombres absolus et en pourcentage en poids de matériel homogène. Veuillez indiquer la fonction de la substance dans le matériel de l'équipement. Veuillez fournir également une estimation des quantités annuelles de la substance dangereuse utilisée dans cette application en particulier.	
2. Veuillez préciser pourquoi l'élimination ou la substitution de la substance dangereuse par des changements de conception ou des matériaux et composants est actuellement techniquement ou scientifiquement infaisable.	
3. Veuillez indiquer si les impacts négatifs sur l'environnement, la santé et/ou la sécurité du consommateur, induits par la substitution sont susceptibles d'être prépondérant aux bénéfices sur l'environnement, la santé et/ou la sécurité du consommateur. Si cela existe, veuillez vous référer aux études relevants des impacts négatifs provoqués par la substitution.	
4. Veuillez indiquer si les matériaux de substitution exploitables existent actuellement dans une échelle industrielle et/ou commerciale. Veuillez indiquer les possibilités et/ou le statut pour le développement des produits de substitution, et indiquer si ces produits de remplacement seront disponibles pour le 1er juillet 2006 ou	.

ultérieurement	
5. Veuillez indiquer si des restrictions actuelles s'appliquent à de tels produits de substitution. Si oui, veuillez citer l'intitulé exact de la législation/de la réglementation appropriées.	
6. Veuillez indiquer les coûts et les bénéficies ainsi que les avantages et les inconvénients de tels produits de substitution. Si cela existe, veuillez vous référer aux études appropriées sur les coûts et les avantages de tels produits de substitution.	
7. Veuillez fournir toutes autres informations appropriées, susceptibles de soutenir votre demande pour une exemption additionnelle.	