## **Questionnaire Exemption Request No. 6**

## "Decorative lamp shades and bases (luminaires) containing lead in the solder used to join/coat the copper foil mounting strips for the glass/shell/other material used in tiffany (like stained glass windows), capiz shell and similar products"

## Background

The Öko-Institut together with Fraunhofer IZM has been appointed within a framework contract for the evaluation of applications for granting, renewing or revoking an exemption to be included in or deleted from Annexes III and IV of the new RoHS Directive 2011/65/EU (RoHS 2) by the European Commission.

The Federation of National Manufacturers Associations for Luminaires and Electrotechnical Components for Luminaires in the European Union (CELMA) has applied for an exemption for "Decorative lamp shades and bases (luminaires) containing lead in the solder used to join/coat the copper foil mounting strips for the glass/shell/other material used in tiffany (like stained glass windows), capiz shell and similar products".

The applicant puts forward the following main arguments:

- The applicant states that lead solder is used to join/coat the copper foil jointing strips to provide a permanent bond. It must be easily and quickly worked to avoid thermal stress to the glass/shell etc.
- The applicant further states that the use of high melting point lead solders (as exempt under RoHS) or lead free solders causes difficulty in working due to the increased working temperature leading to higher scrap levels and increased processing time. Cost increases of around 70% are mentioned as typical.

For details, please check the applicant's exemption request at

<u>http://rohs.exemptions.oeko.info/index.php?id=136</u>. This exemption request has been subject to a first completeness and plausibility check. The applicant has been requested to answer additional questions and to provide additional information (c.f. link above).

If you would like to contribute to the stakeholder consultation, please answer the following questions:

## Questions

- 1. Please state whether you either support the applicant's request or whether you would like to provide argumentation against the applicant's request. In both cases please provide detailed technical argumentation / evidence to support your statement.
- 2. The applicant could not provide an estimate concerning the amount of lead put on the EU market due to the use of lead in this application. Please provide information if possible to quantify this amount. Please include the calculations made and assumptions taken for this assumption.
- 3. Please provide information whether the solder for which this exemption has been requested is in use for the production of the lampshade alone or also for the production of the lamp base.
- 4. Please provide information concerning the existence of lead free solders that may be worked with lower temperatures, thus possibly proving suitable as solder substitutes for use in this application. Please state whether the suggested substitutes are in use in similar applications, thus demonstrating that the substitute holds the required attributes for the application in question. Please elaborate on such attributes that show that the substitute could serve to be a valid alternative, such as solder melting point.
- 5. Please provide further information, where available, concerning further R&D efforts underway for developing substitutions for lead free solders that could be used in this application. Please elaborate what development stages are further necessary and what the suitable timeframes are that need to be considered for these.
- 6. Are there any other arguments being relevant in the context of the evaluation of this request for exemption which are not raised in the questions above and that are of importance?
- 7. Please provide information and data regarding the costs required to set up separate production lines for the fabrication of lead free articles.

Finally, please do not forget to provide **your contact details** (name, organisation, e-mail and phone number) so that Öko-Institut/Fraunhofer IZM can contact you in case there are questions concerning your contribution.