

Consultation Questionnaire Exemption No. 24 (renewal request)

Exemption for „Lead in solders for the soldering to machined through hole discoidal and planar array ceramic multilayer capacitors“

Abbreviations and Definitions

DPCMC through hole discoidal and planar array ceramic multilayer capacitors

Pb lead

Background

The Oeko-Institut and Fraunhofer IZM have been appointed within a framework contract¹ for the evaluation of applications for the renewal of exemptions currently listed in Annexes III of the new RoHS Directive 2011/65/EU (RoHS 2) by the European Commission.¹

Knowles et al. submitted a request for the renewal of the above mentioned exemption, which has been subject to a first completeness and plausibility check. The applicant has been requested to answer additional questions and to provide additional information, to be made available on the webpage of the stakeholder consultation (<http://rohs.exemptions.oeko.info/index.php?id=228>).

The objective of this consultation and the review process is to collect and to evaluate information and evidence according to the criteria listed in Art. 5 (1) (a) of Directive 2011/65/EU (RoHS II), which can be found under:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32011L0065:EN:NOT>

If you would like to contribute to the stakeholder consultation, please read the following summary of the exemption requests and answer the below questions.

Summary of Exemption Requests

The exemption request for this exemption was reviewed in 2005/2006², and the Commission followed the reviewers' recommendation to grant the exemption. The exemption was reviewed again in 2008/2009³. It was recommended to continue the exemption for the maximum four years allowed under directive 2002/95/EC (RoHS I) until 31 July 2014. This expiry date was postponed to July 2016 in light of the recast of the Directive (2011/65/EU - RoHS 2).

Knowles et al. request the continuation of the exemption for another five years with the same wording as they claim that no lead-free alternative solutions are available.

¹ Contract is implemented through Framework Contract No. ENV.C.2/FRA/2011/0020 led by Eunomia

² (Gensch, Carl-Otto [Öko-Institut e.V.], et al. 2006) "Adaptation to scientific and Technical progress under Directive 2002/95/EC: Final Report - final version,"; http://ec.europa.eu/environment/waste/weee/pdf/rohs_report.pdf, page 14 et seqq.

³ For details see report of (Carl-Otto Gensch, Öko-Institut e. V., et al.), with the assistance of Stéphanie Zangl, Rita Groß, Anna Weber, Öko-Institut e. V., and Otmar Deubzer, Fraunhofer IZM (19 February 2009), page 214 et sqq.

For details, please check the applicants' exemption request at:

<http://rohs.exemptions.oeko.info/index.php?id=253>

Questions

1. Knowles et al. tested several lead-free solders without finding an appropriate substitute for lead solders. The best performing lead solders contain up to 50 % indium. Can lead-free solders with indium be a way to achieve RoHS compliance without Ex. 24?
2. Besides changing the solder, alternative pin materials would be a principal approach to replace or at least reduce the amount of lead used under this exemption. Do you know of tests performed since the last review of the exemption in 2008/2009⁴, in order to find alternative pin materials reducing the thermal mismatch between the ceramic, the solder and the pin?
3. Do you agree with the above proposal of Knowles et al. to continue the exemption for another maximum validity period of five years with the current wording?
 - a. Do you agree with the scope and proposed formulation of the exemption as proposed by the applicants? Please take into account the answers to question 1 and 2).
 - b. Please suggest an alternative wording and explain your proposal, if you do not agree with the proposed exemption wording.
 - c. Please explain why you either support the applicants' request or object to it. To support your views, please provide detailed technical argumentation / evidence in line with the criteria in RoHS Art. 5(1)(a).
4. Are there any other aspects you deem to be of importance for the future of the requested exemption?

In case parts of your contribution are confidential, please provide your contribution in two versions (public /confidential). Please also note, however, that requested exemptions cannot be granted based on confidential information!

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

References

Carl-Otto Gensch, Oeko-Institut e. V., et al. 19 February 2009) *Adaptation to scientific and technical progress under Directive 2002/95/EC: Final Report*. With the assistance of Stéphanie Zangl, Rita Groß, Anna Weber, Oeko-Institut e. V. and Otmar Deubzer, Fraunhofer IZM.

⁴ For details see report of (Carl-Otto Gensch, Öko-Institut e. V., et al.), with the assistance of Stéphanie Zangl, Rita Groß, Anna Weber, Öko-Institut e. V., and Otmar Deubzer, Fraunhofer IZM (19 February 2009), page 214 sqq.

Freiburg: . Accessed July 14, 2015.

http://ec.europa.eu/environment/waste/weee/pdf/final_reportl_rohs1_en.pdf;

http://ec.europa.eu/environment/waste/weee/pdf/report_2009.pdf.

(Gensch, Carl-Otto [Oeko-Institut e.V.], et al. 2006) "Adaptation to scientific and Technical progress under Directive 2002/95/EC: Final Report - final version,";

http://ec.europa.eu/environment/waste/weee/pdf/rohs_report.pdf