Questionnaire Exemption Request No. 11

"Lead as an Activator in the fluorescent powder of discharge lamps, when used as photophoresis lamps containing phosphors such as BSP (BaSi2O5:Pb)"

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.

Therakos Photophoresis has applied for an exemption for "Lead as an Activator in the fluorescent powder of discharge lamps, when used as photophoresis lamps containing phosphors such as BSP (BaSi2O5:Pb)".

The applicant puts forward the following main arguments:

1. According to the applicant, it can be understood that at present, the application is in use in a medical therapy, ECP, which constitutes the last therapeutic option for patients with acute symptoms of immune modulated diseases[1] that have failed treatment with other therapies. It can thus be understood that ECP is also the only treatment that can be given to patients at this stage.
2. According to the applicant there are no existing alternative substances at present that may provide the characteristics for this specific application and that have proved reliability in terms of proper function. The applicant states that as the wavelength of the UV light supplied by the BSP phosphor in this application is critical for activation of the application connected process, alternative phosphors of similar spectrum shall either be inefficient in promoting the required reaction or cause possible damage to the users of this application.

[1] As stated in the application: Cutaneous T-cell Lymphoma (CTCL), which is a type of Non-Hodgkin's lymphoma cancer that manifests itself primarily in the skin; Graft versus Host disease which is a serious complication of bone marrow transplants; Cardiac transplant rejection; Lung transplant rejection

A very similar exemption was reviewed in 2006, the summary of which may be found in section 5.6 of the 2nd monthly report, available under http://rohs.exemptions.oeko.info/fileadmin/user_upload/RoHS_VI/Request_11/Request_11_results_previous_Monthly_Report_2_2005.pdf.

Consequentially, an exemption was granted for BSP phosphor lamps used for sun tanning purposes; however it is unclear if this application uses similar lamps or if only the phosphor used is identical.

For details, please check the applicant's exemption request at http://rohs.exemptions.oeko.info/index.php?id=146.

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 requested exemption applies to BSP lamps required for use in ECP systems, however there is information regarding the possible use of BSP lamps in additional applications such as PUVA therapy and sun tanning applications. Can you provide knowledge concerning the use of BSP lamps in additional medical or other applications, for which it should be considered to extend the exemption?
3. The applicant provided in his request for exemption an analysis of possible phosphor alternatives (such as doped Ba,Mg and Sr,Mg aluminosilicate phosphors) for each discussing the material specific properties. Is there any supporting / contradicting evidence that you can provide?
4. Against the background that the applicant states that there are no viable substitutes – is there any supporting / contradicting evidence that you can provide?
    a. Please provide sound data/evidence on why substitution/elimination is either practicable or impracticable.
    b. Why are the substance and its function in the application indispensable or not?
    c. What research has been done? What was the outcome?

   d. Is there a timeline for possible substitutes,
5. 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 of importance?

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.