

Focusing questions for Substance Prioritisation

Compilation and review of quantitative information concerning the various substances on the prioritised shortlist

Abbreviations and Definition

EEE Electrical and electronic equipment

RoHS Directive 2011/65/EU on the restriction of certain hazardous substances

Background

The Oeko-Institut and Fraunhofer IZM have been appointed within a framework contract to technically assist in a “Study to support the review of the list of restricted substances and to assess a new exemption request under RoHS 2 (Pack 15)”. This guidance document has been prepared in relation to the consultation on the compilation and review of quantitative information concerning the various substances on the prioritised shortlist.

The purpose of this consultation is to collect input concerning quantitative usage data for the 43 priority substances in EEE identified in the highest priority group of the substance inventory. Where this is not possible, a magnitude ranking can be provided, with a view to a refined prioritisation for future review cycles. Stakeholders are also asked to specify if they support the information compiled so far and to contribute information as to possible impacts that the presence of the substance may cause during use and/or waste management (relating to RoHS Article 6(1) criteria).

The following questions have been formulated to gather more information in this regard. Input provided shall be used to further substantiate the priorities for performing a RoHS substance assessment of the substances in question.

An Excel document is provided that contains initially compiled information and areas where further input is requested in table form, regarding all relevant substances. Please follow this link to download the Excel document on the website of the stakeholder consultation: https://rohs.exemptions.oeko.info/fileadmin/user_upload/RoHS_Substance_Review/Substance_Profile_s/Questionnaire_Background_Info_Substances_prioritisation.xlsx

If you would like to contribute to the stakeholder consultation, please answer the following questions. Please use the Excel document provided on the consultation page for this purpose. If you are not able to use the Excel document for your contribution, you may also fill in this document.

In case parts of your contribution are confidential, please clearly mark relevant text excerpts or better yet, provide your contribution in two versions (public /confidential).

Questions:

1. Contact Information

- Name: _____
- Organization: _____
- Email: _____
- Telephone: _____

2. Area of activity (more than one is possible):

- Industry;
- Retail/distribution;
- Rent/repair business;
- Industry/business association;
- RoHS enforcement;
- RoHS analysis;
- Environmental NGO;
- Consumer NGO;
- Institute/consultancy;
- EU Member State Representative;
- International agency / organisation;
- Other - Please specify: _____

3. Please indicate which substance the information provided in this document concerns:

- Boric acid
- 1-bromopropane
- Bis(2-methoxyethyl) ether (Diglyme)
- Tris(2-chloroethyl)phosphate (TECP)
- Bis(2-methoxyethyl) phthalate
- C,C'-azodi(formamide) (ADCA)
- N,N-dimethylacetamide (DMAC)
- Diarsenic pentaoxide; Arsenic pentoxide; Arsenic oxide
- Diboron trioxide
- Disodium tetraborate, anhydrous
- Dipentyl phthalate (DPP)
- Nickel monoxide
- Zinc oxide
- Diarsenic trioxide; Arsenic trioxide
- Tris(2-chloro-1-methylethyl)phosphate (TCCP)
- Tris[2-chloro-1-(chloromethyl)ethyl] phos-phate (TDCP)
- Hexahydro-4-methylphthalic anhydride
- Henicosafuoroundecanoic acid
- Trixylyl phosphate (TXP)
- Hexahydromethylphthalic anhydride
- 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)
- Tricosafuorododecanoic acid
- Perfluorodecanoic acid (PFDA)
- 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl)phenol (UV-350)
- Perfluorononan-1-oic-acid (PFNA)
- Heptacosafuorotetradecanoic acid

- 2-benzotriazol-2-yl-4,6-di-tert-butylphenol
- 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl)phenol (UV-327)
- Hexahydro-1-methylphthalic anhydride
- Formaldehyde
- [4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride
- Hexahydro-3-methylphthalic anhydride
- N,N-dimethylformamide (DMF)
- 1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters (DHNUP)
- 1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich (DIDP)
- 1,2-Benzenedicarboxylic acid, dihexyl es-ter, branched and linear
- 1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters or mixed decyl and hexyl and octyl diesters
- 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich (DIHP)
- Perfluorotridecanoic acid
- Nickel (Ni)
- Cyclohexane-1,2-dicarboxylic anhydride
- 1-methyl-2-pyrrolidinone (NMP)
- reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate and 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE and MOTE)

4. Applications in which substance is in use

- a) Please provide information concerning products and applications in which the substance indicated in Question 3 is in use.
- b) In your answer please specify if the application is relevant to EEE products and applications or not.
- c) Please elaborate if substitution of the substance indicated in Question 3 is already underway in some of these applications, and where relevant elaborate which chemical or technological alternatives may be relevant for this purpose.
- d) Please indicate whether the substance is present in its nano form in EEE.

5. Quantities ranges in which the substance is in use

- a) Please provide information as to the ranges of quantities in which the substance indicated in Question 3 is present in products in general and in the EEE sector within the EU (tonnes per annum). Please explain the basis for your estimations and provide references or further data if relevant.
- b) If substitution has begun or is expected to begin shortly, please estimate how the trend of use is expected to change over the coming years.

6. Impacts related to RoHS Article 6(1) criteria (use phase and waste management)

Please provide information on whether evidence exists that a substance has known impacts related to RoHS Article 6(1) criteria, i.e., the substance:

- a) could have a negative impact during EEE waste management operations, including on the possibilities for preparing for the reuse of waste EEE or for recycling of materials from waste EEE;
- b) could give rise, given its uses, to uncontrolled or diffuse release into the environment of the substance, or could give rise to hazardous residues, or transformation or degradation products through the preparation for reuse, recycling or other treatment of materials from waste EEE under current operational conditions;
- c) could lead to unacceptable exposure of workers involved in the waste EEE collection or treatment processes.