

Questionnaire No. 15

“Lead not exceeding 20% in bronze bearings and bushes in monitoring and control instruments (Category 9.)”

Background

The Öko-Institut together with Fraunhofer IZM has been appointed for the technical assistance in reviewing the requests for exemptions from the requirements of the RoHS Directive 2011/85/EU (RoHS II) by the European Commission. You have submitted the above mentioned request for exemption which has been subject to a first completeness and understandability check.

As a result we have identified that there is some information missing and a few questions to clarify before we can proceed with the online consultation on your request. Therefore we kindly ask you to reformulate your request taking the following points into consideration.

Questions

1. Which specific applications of category 9 products exceed the conditions of vehicle applications? Please provide an exhaustive list of those products / applications where lead-free bearings and bushes are not applicable, taking into account the specific parameters.

In contrast to vehicle applications, those in category 9 vary from wide temperature applications such as cryogenic pumps, high pressures (1200 bar) in liquid chromatography analyzers and high volume pumps for emergency cooling, A 1 MegaWatt emergency cooling pump used in applications such as power stations or petro chemical plants is larger than a family sized vehicle and has a greater pumping load than any pump in a vehicle, hence specifications for bearing materials differ considerably. Regarding an exhaustive list of those products / applications where lead-free bearings and bushes are not applicable, taking into account the specific parameters it is not possible to provide an exhaustive list however the high pressure (1200 bar) pump used in liquid chromatography analyzers does have lead above 0.1% in bearings. No additional information is available in advance of the public consultation.

2. Is there any test result available providing evidence of health and safety impacts if substituted materials would not meet required operating conditions?

The research into alternatives for applications covered by the old exemptions; testing and evaluation of available substitutes and defining of transition programmes; was not considered a priority as there was no apparent regulatory requirement since these applications were presumed to be available for the new categories brought into the RoHS scope. Consequently, we cannot provide evidence of health and safety impacts of substituted materials.

3. Please provide evidence on the product development cycles of category 9 products. Aren't there products / application with shorter periods for re-design?

As noted in the conclusions of the ERA study "Manufacturers in categories 1-7 and 10 had about 3 ½ years in which to modify their products between the date that RoHS was published and the date it came into force. Products in categories 8 & 9 need the same amount of time plus additional time for extensive testing, validation and trials which can be as long as 2 years and then approval which can be as long as another two years." This position has not changed - Products that are subject to less stringent approvals take less time from inception to being made available on the market.

Test & Measurement equipment, because of its longevity and complexity, goes through less frequent and slower redesign cycles than typical consumer electronics. For further details see General comments section Sections 2.2. 5, 7, 8 and 9.

4. When did you start with efforts to redesign of bearings and bushes in monitoring and control instruments?

It must be pointed out that it was NOT clear for our category of products that exemption 9(b) would expire since category. 9 was not yet in the scope of RoHS and the existing RoHS exemptions were not assessed for this category and therefore there was no need for redesigning products. The European Commission and ERA confirmed the need of continuation of the exemptions for category 9.

The research into alternatives for applications covered by the old exemptions; testing and evaluation of available substitutes and defining of transition programmes; was not considered a priority as there was no apparent regulatory requirement since these applications were presumed to be available for the new categories brought into the RoHS scope. For further details see General comments Sections 1.1 and 2.1.

5. Could you please estimate the total annual amount of lead in bronze bearings and bushes in monitoring and control instruments in the EU?

Detailed technical information is not available at this stage. The reason is that this exemption was presumed to be available for category 9 and therefore no detail assessment and investigation has been performed so far. Our supply chains are very complex as our products are made of thousands of parts and we deal with a substantial number of suppliers. For further details see General comments Sections 1 and 2.2. 8.