

## 1st Questionnaire Exemption No. 6c (renewal request)

### *Exemption for „Copper alloy containing up to 4 % lead by weight“*

#### Abbreviations and Definitions

Pb	Lead
EEE	Electrical and Electronic Equipment

#### Background

The Oeko-Institut and Fraunhofer IZM have been appointed within a framework contract<sup>1</sup> 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.<sup>1</sup>

Framo Morat has submitted a request for the renewal of the above mentioned exemption, which has been subject to a first evaluation. The information you have referred has been reviewed and as a result we have identified that there is some information missing and have formulated a few questions to clarify some aspects concerning your request.

#### Questions

1. Please provide a translation of your application form that can be made public, to allow stakeholders to review your information and where relevant to express their support or their disagreement in the Stakeholder consultation.

→ The translation is attached to the written mail.

2. Please specify the applications for which Framo Morat needs the exemption for:
  - a. In which Electrical and Electronic Equipment (EEE) are the snail gears (“*Schneckenräder*”), helical gears (“*Schraubräder*”) and external and internal geared spur gears (“*außen- und innenverzahnte Stirnräder*”) used?

→ These gears are used in a wide variety of equipment (EEE) and it is not possible to pinpoint a specific application for these. Gear motors would be a nameable example.

- b. What Annex I category do they fall under?

→ We see our own application placed in category 11, since it is named in Annex I. It is of course possible, that other - more specialised - companies are able to name a different category.

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

3. Please provide an estimation of the amount of lead placed on the market per year by the applications of Framo Morat.

→ The estimated amount of lead, which was placed on the market in 2014, is about 700kg.

4. Please specify the technical properties /qualities that are provided by lead which are of importance for the applications mentioned in Question 2(a).  
As for machinability, please specify which machining processes are applied and specify where the absence of lead would affect the efficiency of the machining process.

Technical properties / qualities:

→ Worm gears can shortly run without a lubricant. Lead supports the dry-running performance of the sets and therefore increases the lifetime and safety.

Impact of absence of lead:

→ Poor machinability of the work pieces.

→ Processing time would take longer. → cost increase.

→ Tooling costs would increase. Lifetime of the tools would be shorter and procurement costs would increase because of the higher material property requirements.

→ Machine set-up time would repeat more often. → cost increase.

5. Are you aware of other manufacturers of the applications mentioned in Question 2(a)?  
Please state names of other manufacturers.

→ Yes, please find the names of these manufactures by internet searching under the words „Schneckengetriebehersteller“, „Schraubradgetriebehersteller“ und „Stirnradgetriebehersteller“.

6. We understand from answer “Zu Anhang 5j” that the applications specified in Question 2(a) shall only require the use of alloys with a lead content of < 1% by weight in copper alloys over the next years. Please propose a reformulation of the exemption in terms of the specified threshold provided for lead.

→ Referring to Annex III - 6c: **Copper alloy containing up to 1% lead by weight.**

Here it is an important fact, that Framo would appreciate the retention of the limitation of up to 4%.

**Please note that answers to these questions are to be published as part of the available information relevant for the stakeholder consultation to be carried out as part of the evaluation of this request. If your answers contain confidential information, please provide a version that can be made public along with a confidential version, in which proprietary information is clearly marked.**