

Specific questions exemption 6

“Lead as an alloying element in steel containing up to 0,35 % lead by weight, aluminium containing up to 0,4 % lead by weight and as a copper alloy containing up to 4 % lead by weight”

The following specific questions should be answered in your stakeholder contribution if you support exemption 6 to be continued / amended / discontinued:

1. Which applications falling under the scope of the RoHS Directive use these lead-containing metals? Please give a comprehensive **list of applications** or an appropriate grouping of applications.
2. What is the amount of lead in these applications? Please state the **amount of lead** used per application, the lead content in the homogeneous material, the annual production volume as well as the number of applications related to exemption 6 put on the EU market annually.
3. The use of lead as an alloying element in steel, aluminium and copper up to a certain amount is not only exempted under the RoHS Directive, but also under the ELV Directive (Annex II). The **exemption under the ELV Directive** has just been evaluated. Results can be found in the final report at http://circa.europa.eu/Public/irc/env/elv/library?l=/stakeholder_consultation/evaluation_procedure/reports/final_report&vm=detailed&sb=Title. Please state which of the results and statements are also valid for applications falling under the scope of RoHS.
4. Which applications falling under the scope of the RoHS Directive using these kind of lead-containing metals have **different / specific requirements** compared to the use in automotive industry?
5. Use of **lead as an alloying element in steel**: do you support the conclusion given in the above-mentioned report that there currently is no substitute for this use of lead in steel? One particularity of the use in automotive applications was that steels used in the automotive industry go through a variety of machining operations. Thus, the overall performance of steels in the various machinability tests (chip form, tool life and wear, surface finish, tool force, hot workability, deep drilling, etc.) need to be considered. Is this also valid for RoHS related applications?
6. Use of **lead as an alloying element in aluminium**: do you support the conclusion given in the above-mentioned report that there should be no difference made between the intentional and unintentional use of lead in aluminium and that no substitutes are available for this use of lead in aluminium?

7. Use of **lead as an alloying element in copper**: the following points remained open in the above-mentioned report. Please answer them in relation to applications falling under the scope of RoHS.
 - a. Leaded copper alloys are still used in a wide range of RoHS applications. For some of the applications it is not comprehensible why a **substitution to lead-free alternatives** is not possible (not safety-relevant applications). Please explain / justify / list applications for which substitution is technically not feasible and applications for which substitution is indeed feasible.
 - b. Furthermore, it was not possible to evaluate whether or not lead-free alternatives could substitute leaded copper alloys (at least in some applications), since no **detailed data or documentation** on test results on lead-free alternatives (e.g. "Ecobrass") were provided. Please provide such data and information.
 - c. **Different statements** regarding the maximum concentration value of lead in copper alloys were submitted: One stakeholder states that a reduction of the maximum concentration value from 4% to 3% lead by weight in copper alloys is principally possible whereas in another statement it is emphasised that the concentration value of 4% lead is still justified and necessary. Please state which statement you support and provide supporting documentation.
8. Assuming the current exemption will be given an **expiry date**, what date do you think is technologically feasible for industry?