

Specific questions exemption 27

“Lead alloys as solder for transducers used in high-powered (designated to operate for several hours at acoustic power levels of 125 dB SPL and above) loudspeakers”

The following specific questions should be answered in your stakeholder contribution if you support exemption 27 to be continued / amended / discontinued:

Note:

During the last evaluation in 2006, the main reasons for the recommendation of an exemption for this application were the following:

- Reliability due to the unique conditions under which these solders are used (stress in the loudspeakers): at high acoustic power levels the transducer’s solder joints are subjected to continuous extreme mechanical and thermal stresses (accelerations up to 5000 g’s and voice-coil temperature peaks up to 180°C. At that time (2006), the applicant claimed that the lead-based alloys were the only proven solder alloys capable of withstanding the stresses produced in transducers used for high acoustic power applications.
 - Several other loudspeaker manufacturers were contacted and some of them claimed to have a RoHS compliant solution. It turned out, however, that these competitors with their products covered a different product range so that their lead-free solution could not be applied to the application for which the exemption was requested.
1. 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 27 put on the EU market annually.
 2. Please indicate the reasons for or against the **continuation** of this exemption. Are the above mentioned arguments from the previous evaluation still valid?
 3. In case you want the exemption to be continued, please provide a **roadmap** with activities, milestones and timelines towards the replacement of lead in this application.
 4. Was has changed since the **last evaluation** in 2006?