

## Specific questions exemption 7

**“(a) Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead), (b) lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission as well as network management for telecommunications, (c) lead in electronic ceramic parts (e.g. piezoelectronic devices)”**

The following specific questions should be answered in your stakeholder contribution if you support exemption 7(a) (“Lead in high melting temperature type solders (i.e. lead-based alloys containing 85 % by weight or more lead)”) to be continued / amended / discontinued:

1. Which **types of solders** (composition and melting points) are currently used in applications falling under this exemption? Specify what type of **applications** these solders are used in.
2. Is the exemption still required for all of these applications? In which applications can the use of these leaded solders not yet be avoided? Please present a **roadmap** or similar evidence for the elimination of lead. If possible, please provide a roadmap with activities, milestones and timelines towards the **replacement of lead in High Melting Point (HMP) solders** used in these applications.
3. What is the **amount of lead** per application, the lead content in the homogeneous material, the annual production volume as well as the number of applications related to exemption 7(a) put on the EU market annually.
4. What has changed compared to the **last evaluation** in 2004?

The following specific questions should be answered in your stakeholder contribution if you support exemption 7(b) (“Lead in solders for servers, storage and storage array systems, network infrastructure equipment for switching, signalling, transmission as well as network management for telecommunications”) to be continued / amended / discontinued:

### Note:

During the last evaluation of this exemption in 2004, manufacturers of the above equipment were concerned the use of lead-free solders might affect the long-term reliability of their products if lead-free solders were used. Meanwhile, more than four years have passed, and much more experiences are available with the processing of lead-free solders and finishes, components qualified for lead-free soldering, whiskers and whisker testing, reliability testing and qualification of lead-free solders and assemblies etc. Also, field data on lead-free soldered PCBs have become available throughout the last years.

1. Please describe the current status of **lead-free soldering** in applications covered by exemption 7 (b).
2. Please explain whether and in which **applications** covered by exemption 7 (b) the exemption for lead-solders is still necessary, and in which applications it has become obsolete.
3. What is the **amount of lead** per application, the lead content in the homogeneous material, the annual production volume as well as the number of applications related to exemption 7(b) put on the EU market annually.
4. When can lead solders be substituted by lead-free solders or other RoHS-compliant materials or designs in specific applications? Please provide a **roadmap** or similar evidence with activities, milestones and timelines towards the replacement of lead in these applications.
5. Please propose a new **wording** limiting the current exemption to those applications where substitution is technically not feasible.
6. Assuming the current exemption will be given an **expiry date**, what date do you think is technologically feasible for industry?

The following specific questions should be answered in your stakeholder contribution if you support exemption 7(c) ("lead in electronic ceramic parts (e.g. piezoelectronic devices)") to be continued / amended / discontinued:

1. What are the **different applications of lead** in electronic ceramic parts?
2. What is the **amount of lead** per application, the lead content in the homogeneous material, the annual production volume as well as the number of applications related to exemption 7(c) put on the EU market annually.
3. Please explain whether and how lead can be **substituted** in the different applications in ceramics.
4. Please provide a **roadmap** or similar evidence with activities, milestones and timelines towards the replacement of lead in these applications.
5. Do you consider **thickfilm applications** to be covered by the current wording of exemption 7(c)?