

Specific questions exemption 20

“Lead oxide in glass used for bonding front and rear substrates of flat fluorescent lamps used for Liquid Crystal Displays (LCD)”

The following specific questions should be answered in your stakeholder contribution if you support exemption 20 to be continued / amended / discontinued:

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 20 put on the EU market annually. What are the expectations for the future (especially taking into account the development of the various types of flat panel displays)?.
2. Could you provide an **update of the R&D-activities** for lead-free substitutes (what has changed since the last evaluation)? What are the alternatives to lead and which ones are (likely to be) used as substitutes? Are there any results about strengths and weaknesses expressed in results relating to (technical) performance criteria? What technical characteristics do substitutes need to fulfil as a minimum requirement?
3. Are manufacturers still **investigating alternatives**?
 - a. If yes, please provide a **roadmap** or similar evidence showing until when they intend to replace lead in glass in the applications mentioned above.
 - b. If no, please explain and justify why no further research has been undertaken against the background that the RoHS Annex is subject to regular revisions.
4. Assuming the current exemption will be given an **expiry date**, what date do you think is technologically feasible for industry?