

March 2008

## Review of RoHS Exemptions: Cérame-Unie contribution to support exemption 7(c)

### *“lead in electronic ceramic parts (e.g. piezoelectronic devices)”*

Discussions with producers and users of piezoceramics had a clear result: The exemption 7(c) of lead in electronic ceramic parts is still necessary in the future. Lead free piezoelectronic parts, for instance, are still not at the same level as lead containing components what is clearly demonstrated by JEITA and others (see enclosed slide, which was sent last year to the Commission for the exemption of lead from the ban in the automotive industry, by JEITA, the Japan Electronics and Information Technology Industries Association, see “Adaptation to Scientific and Technical Progress of Annex II Directive 2000/53/EC, Contract N°07010401/2007/470145/ATA/G4, Final Report Amended 2008/01, page 70).

The German ZVEI (Zentralverband der Elektroindustrie) and its European umbrella organization will send separately a detailed dossier on lead in electronic ceramic parts to the consultant.

Please find below the answers to the specific questions to support exemption 7 (c) to be maintained:

1. What are the **different applications of lead** in electronic ceramic parts?  
The applications are e.g. sensors, actuators, filters, sound parts, resonators, thermistors, microwave application ...
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?  
The lead content in ceramic electronic parts (not in the component or device!) ranks from 4% (Thermistor) up to 70 weight% (piezoelectronic part). Market data will be provided by the association of the component and device producers.
3. Please explain whether and how lead can be **substituted** in the different applications in ceramics.  
Up to now, there is no substitute available.
4. Please provide a **roadmap** or similar evidence with activities, milestones and timelines towards the replacement of lead in these applications.  
As there is no substitute, no roadmap for replacement exists.
5. Do you consider **thickfilm applications** to be covered by the current wording of exemption 7(c)?

It seems that thickfilm applications are not fully covered with the current wording, because the exemption is for lead in electronic ceramic parts.

We hope these answers clarify our support to maintain exemption 7 (c) in the RoHS Directive.

We remain at your full disposal should you wish more information or require a meeting to further discuss this issue.

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