

Adaption to scientific and technical progress under Directive 2002/95/EC

Results previous evaluation
Exemption No. 17

“Lead halide as radiant agent in High
Intensity Discharge (HID) lamps used for
professional reprography applications”

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5.5 High Intensity Discharge (HID) lamps for professional UV applications, containing lead halide as radiant agent

Requested exemption

The European Lamp Companies Federation (ELCF) requests an exemption for Pb in the form of PbI_2 as component in filling of certain High Intensity Discharge (HID) lamps. The function of PbI_2 consists in creating specific lines in emission spectrum of the lamp, necessary for several professional UV applications: curing, reprography, label printing industry. The total annual amount of PbI_2 in this application is about 10 kg (total EU market, 2004 figures).

Summary of justification for exemption

The applicant justifies the request technically: no substitutes are known that results in a comparable emission spectrum and efficacy. According to the applicant these lamps are mostly used for professional reprography applications (diazoprinting). The technology is old and is gradually being replaced by digital printing. The application is declining by about 10% per year. Therefore no new systems are built with this type of lamps. It is mostly replacement of end of life lamps. No design changes are planned for this reason.

Final recommendation

Basically this exemption request should be granted according to Article 5 (1) b, as no viable substitutes are existent. Furthermore it is predictable that for professional reprography due to technological changes redesigning processes or equipments is unlikely.

However the exemption should be restricted to those applications depending on the specific emission spectrum. In this context the question remains whether curing applications are depending on this specific emission spectrum.

Until clarification of this fact an exemption should be restricted as follows:

“Lead halide as radiant agent in High Intensity Discharge (HID) lamps used for professional reprography applications.”

Regarding the typical lifetime of HID lamps used for professional reprography applications the exemption should be restricted to a certain period, taking the remaining life-time of the professional reprography applications into account.