

BSGA Guidance Note 2014.11/1

RoHS Regulations, Mercury in signs Exemption for the UK Sign Industry

- European RoHS regulations apply to : *“electrical and electronic equipment”* as defined by the “recast” Regulations of 2011 as:-
 - “equipment which is dependent on electric currents or electromagnetic fields in order to work properly and equipment for the generation, transfer and measurement of such currents and fields for use with a voltage rating not exceeding 1000 volts for alternating current (AC) and 1500 volts for direct current (DC).*
- Many individual cold cathode mercury lamps for neon signs run at less than 1000 volts AC and are considered as not high voltage. Therefore the RoHS Regulations would apply to those lamps. You may be more familiar with the description “argon mercury” lamps.
- However, an exemption has been obtained by the BSGA and ESF for lamps of this kind (and related kinds). They have been designated Hand Crafted Luminous Discharge Tubes (HLDT).
- In summary, the amount of mercury allowed in the manufacture of mercury lamps used in Argon mercury lamps for “neon” signs and cold cathode lighting, is limited to a maximum of 80mg per tube, which is dependent on the tube dimensions (see Table below an extract from Annex iii of directive 2011/65/EU) and this exemption is valid until 31st December 2018.

4(g)	Mercury in hand crafted luminous discharge tubes used for signs, decorative or architectural and specialist lighting and light-artwork, where the mercury content shall be limited as follows:- (a) 20 mg per electrode pair + 0.3 mg per tube length in cm, but not more than 80 mg, for outdoor applications and indoor applications exposed to temperatures below 20 Degrees C: (b) 15 mg per electrode pair + 2.4 mg per tube length in cm, but not more than 80 mg, for all other indoor applications.	Expires 31/12/18
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- There are restrictions imposed and the official document should be referred to ensure compliance. A full BSGA/ESF Technical Guideline/Guidance note will be available. The official document can be found at <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0076&from=EN>
- Further, you may be aware of the Minamata Convention. This no limitations in its scope for equipment voltages. Copies in various languages can be found here <http://www.mercuryconvention.org/Convention/tabid/3426/Default.aspx>

- The Minamata Convention states:-
 - *“Each party shall not allow, by taking appropriate measures, the manufacture, import or export of mercury added products listed in Part 1 of Annex A after the phase-out date specified for those products, except where an exclusion is specified in Annex A or the Party has a registered exemption pursuant to Article 6”*
 - Part 1 of Annex A includes the only reference to cold cathode lamps as follows:-
 - *Mercury in cold cathode fluorescent lamps and external electrode fluorescent lamps (CCFL and EEFL) for electronic displays:*
 - *(a) a short length ($\leq 500\text{mm}$) with mercury content exceeding 3.5mg per lamp*
 - *(b) medium length ($>500\text{mm}$ and $\leq 1500\text{mm}$) with mercury content exceeding 5mg per lamp*
 - *© long length ($>1500\text{mm}$) with mercury content exceeding 13mg per lamp*
 - 2020
- It could be interpreted from the Minamata Convention along with many other fluorescent lamps (including CFL and linear) cold cathode lamps will be banned from 2020 and that this does not apply to cold cathode lamps for lighting and signs. We have been assured by BIS (the UK Government Department for Business Innovation and Skills) who oversee RoHS in the UK, that, if an exemption exists in RoHS, it will also apply in Minamata.
- As part of the RoHS exemption application, and a fundamental part of RoHS Regulations themselves, there must be a program to investigate reducing the amount of mercury used and to manage the use of mercury during the lamp manufacturing process. The former has yet to be arranged while it is proposed that the latter is covered by extending the Belgian Eco Quality Neon program across Europe.
- It is imperative that this key part of the UK Sign Industry is protected. There must be a rigorous program to investigate reducing the amount of mercury used, to manage the use of mercury during the lamp manufacturing process and the use of mercury recycling as part of lamp disposal.

BSGA Members are kept informed of the legislation and other requirements necessary to help keep them and their clients from falling foul of their obligations.

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