

1st Questionnaire Exemption No. 6(a), 6(b) and 6(c) (renewal request)

Exemption for:

6(a) „Lead as an alloying element in steel for machining purposes and in galvanised steel containing up to 0,35 % lead by weight“;

6(b) “Lead as an alloying element in aluminium containing up to 0,4 % lead by weight”; and

6(c) “Copper alloy containing up to 4 % lead by weight”

Abbreviations and Definitions

Pb Lead

EEE Electrical and Electronic Equipment

Background

The Oeko-Institut and Fraunhofer IZM have been appointed within a framework contract¹ for the evaluation of applications for the renewal of exemptions currently listed in Annexes III of the new RoHS Directive 2011/65/EU (RoHS 2) by the European Commission.¹

Sensata Technologies has submitted a joint request for the renewal of the above mentioned exemptions in one application, which has been subject to a first evaluation. The information you have referred has been reviewed and as a result we have identified that there is some information missing and have formulated a few questions to clarify some aspects concerning your request.

Questions regarding Exemption 6(a) „Lead as an alloying element in steel for machining purposes and in galvanised steel containing up to 0,35 % lead by weight“:

1. Please specify the applications for which Sensata Technologies needs the exemption for. Please describe the type of components manufactured of steel alloys containing lead. [Latching components within the tripping and actuation mechanism](#)
2. Please explain why information on the amount of lead applied per year in steel alloys used in Sensata products is not available at Sensata Technologies. Is it possible to provide an estimation e.g. via the number of components, their average size and the average lead share within the alloy? [Estimated amount of lead in the predefined components supplied to Europe < 1kg](#)
3. Please provide information how Sensata Technologies stimulates its supply chain towards the development of possible alternatives to lead containing steel alloys. [The Sensata supply chain for lead containing steel alloys comprises companies whose expertise is in stamping and screw-machining. Neither Sensata nor the Sensata supply chain has the expertise or resources to develop alternatives to lead containing steel alloys. For this reason the focus of the efforts made by Sensata has been on existing materials, none of which has proven to be a suitable replacement.](#)

¹ Contract is implemented through Framework Contract No. ENV.C.2/FRA/2011/0020 led by Eunomia

Questions regarding Exemption 6(b) „Lead as an alloying element in aluminium containing up to 0,4 % lead by weight“:

1. Please specify the applications for which Sensata Technologies needs the exemption for. Please describe the type of components manufactured of leaded Al alloys. After close investigation Sensata is not making use of this exempt.
2. Please explain why information on the amount of lead applied per year in aluminium alloys used in Sensata products is not available at Sensata. Is it possible to provide an estimation e.g. via the number of components, their average size and the average lead share within the alloy?
3. Please provide information how Sensata Technologies stimulates its supply chain towards the development of possible alternatives to lead containing aluminium alloys.

Questions regarding Exemption 6(c) „Copper alloy containing up to 4 % lead by weight “:

1. Please specify the applications for which Sensata Technologies needs the exemption for:
 - a. Please describe the type of components manufactured of leaded copper alloys Connectors, Bushings, Terminals, Screws, Hex nuts, Washers, Rivets.
 - b. Please describe the sensor and control products in more detail. In which Electrical and Electronic Equipment (EEE) are they used? Thermal Motor Protectors, Thermal Circuit Breakers. Hydraulic Magnetic Circuit Breakers
2. Please explain why information on the amount of lead applied per year in copper alloys used in Sensata products is not available at Sensata Technologies. Is it possible to provide an estimation e.g. via the number of components, their average size and the average lead share within the alloy? Estimated amount of lead in lead containing copper alloys per year to Europe in Sensata products = 500kg
3. Please provide information how Sensata Technologies stimulates its supply chain towards the development of possible alternatives to lead containing copper alloys. The Sensata supply chain for lead containing copper alloys comprises companies whose expertise is in stamping and screw-machining. Neither Sensata nor the Sensata supply chain has the expertise or resources to develop alternatives to lead containing copper alloys. For this reason the focus of the efforts made by Sensata has been on existing materials, none of which has proven to be a suitable replacement.

Please note that answers to these questions are to be published as part of the available information relevant for the stakeholder consultation to be carried out as part of the evaluation of this request. If your answers contain confidential information, please provide a version that can be made public along with a confidential version, in which proprietary information is clearly marked.