

02/03/2021

Stakeholder consultation on exemption request evaluation under Directive 2011/65/EU

Consultation Questionnaire Exemptions 6(a) & 6(a)-I

- Exemption 6(a) for “Lead as an alloying element in steel for machining purposes and in galvanised steel containing up to 0,35 % lead by weight”, and
- Exemption 6(a)-I for „Lead as an alloying element in steel for machining purposes containing up to 0,35 % lead by weight and in batch hot dip galvanised steel components containing up to 0,2 % lead by weight”

British Steel submits a response to the above noted consultation in relation to exemptions in relation to Directive 2011/65/EU Annex III 6(a) and 6(a) -1.

British Steel supports the request for exemptions for lead as an alloying element in steel for machining purposes up to 0.35% lead by weight.

Table 2-1: RoHS exemption requests covered by this stakeholder consultation

No.	Wording according to the terms of reference	Applicants
Requested renewal of existing exemption		
Annex III, 6(a) and 6(a)-I	“Lead as an alloying element in steel for machining purposes and in galvanised steel containing up to 0,35 % lead by weight.” and “Lead as an alloying element in steel for machining purposes containing up to 0,35 % lead by weight and in batch hot dip galvanised steel components containing up to 0,2 % lead by weight”	RÖHM GmbH; The Umbrella Project

British Steel present responses to the consultation questions below, marks in **green text, in italics and bold**.

Questions for stakeholders

1. The applicant requests relate to the renewal of Ex. 6(a)-I for all EEE categories, suggesting that Cat. 8, 9 and 11 currently covered under Ex. 6(a) would be merged into Ex. 6(a)-I. and Ex. 6(a) would cease to be valid:
 - a. Do you agree with the scope of the exemption requests?
 - i. ***British Steel agrees with the scope of the exemptions.***
 - b. Please suggest an alternative wording and explain your proposal, if you do not agree with the proposed exemption wording.
 - i. ***Not applicable***
 - c. Please explain why you either support the applicant’s request or object to it. To support your views, please provide detailed technical argumentation / evidence in line with the criteria in Art. 5(1)(a) to support your statement.
 - i. ***British Steel supports the applicants request***
 - ii. ***Lead in steel provides a lubrication function and aids machining and processing of steel reducing power requirements during machining.***
 - iii. ***This also allow up 73% higher cutting speed***
 - iv. ***The use of lead in steel promotes:***
 1. ***Lower energy costs and a reduction in CO₂ emissions during machining***
 2. ***Lower manufacturing cycle times***
 3. ***Long machine tool life***

4. *Improved surface finish*
5. *Promotes chip breaking during the machining process*

2. Please provide information concerning possible substitutes, as to research initiatives which are currently looking into the development of possible alternatives or any other developments that may enable reduction, substitution or elimination, at present or in the future, of exemption 6(a) & 6(a)-I;
 - a. In this regard, please provide information as to alternatives that may cover part or all of the applicability range of exemption 6(a) & 6(a)-I; Please provide quantitative data as to application specifications to support your view.
 - i. *Lead provides the best function in steel products to increase cutting speeds and increase tool life.*
 - b. Please explain in what applications substitution may be possible in the future.
 - i. *Alternative alloying elements have been researched and all provide poorer results in terms of benefits for machinability and tool wear*
 - c. Please provide a roadmap of on-going research (phases that are to be carried out), detailing the current status as well as the estimated time needed for further stages.
 - i. *Alternative alloying elements have been researched and all provide poorer results in terms of benefits for machinability and tool wear*
 - ii. *British Steel routinely investigates improvements in steel making techniques including the use and alternatives to alloying elements*
3. Regarding the lead-free alternative 11SMn30-EM + C:
 - a. Please provide information whether the lead-free alternative 11SMn30-EM + C may cover part or all of the application range of steel containing lead for machining purposes. What performance indicators speak for or against the use of 11SMn30-EM+ C? Please differentiate where relevant between application areas that differ in terms of suitability and or in terms of performance.
 - i. *British Steel does not believe 11SMn30-EM + C is a viable alternative to leaded steel grades*
 - b. Röhm GmbH states that there is only one supplier providing the type of lead-free steel which could be used as a substitute in some applications and that there will be market bottlenecks in availability. Please provide further (quantitative) information to substantiate this statement.
 - i. *No response provided*
4. According to UP, the European secondary zinc industry may be able to reduce the Pb levels in recycled zinc available to the batch galvanising industry.
 - a. Please elaborate on any developments in this respect.
 - i. *No response provided*
 - b. Please make a proposal for a lowered Pb-value for hot dipped galvanised steel.
 - i. *No response provided*
5. Please explain why you either support the applicant's request or object to it. To support your views, please provide detailed technical argumentation / evidence in line with the criteria in Art. 5(1)(a) to support your statement.
 - a. *British Steel supports the request for exemptions for lead as an alloying element in steel for machining purposes up to 0.35% lead by weight. We do not believe viable alternatives exist that would provide up to 75% higher cutting speed and also assure more than a 2 times higher tool life.*

Yours sincerely

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