

Exemption Request Form

Date of submission: 20.01.2020

1. Name and contact details

1) Name and contact details of applicant:

Company:	RÖHM GmbH	Tel.:	+ 49 7325 16 563
Name:	Ch. Weghake	E-Mail:	Christian.weghake@roehm.biz
Function:	Head of Qualitymanagement	Address:	Heinrich Röhm Straße 50 89567 Sontheim

2) Name and contact details of responsible person for this application (if different from above):

Company:	XXX	Tel.:	XXX_____
Name:	XXX_____	E-Mail:	XXX_____
Function:	XXX_____	Address:	XXX_____

2. Reason for application:

Please indicate where relevant:

- ☐ Request for new exemption in:
- ☐ Request for amendment of existing exemption in
- ☒ Request for extension of existing exemption in
- ☐ Request for deletion of existing exemption in:
- ☐ Provision of information referring to an existing specific exemption in:
 - ☐ Annex III
 - ☐ Annex IV

No. of exemption in Annex III or IV where applicable: 6 (a)

Proposed or existing wording: _____

Duration where applicable: _____

☐ Other: _____

3. Summary of the exemption request / revocation request

The RÖHM company is a producer in Europe for drill chucks which are used in electrical and electronical tools (power tools). All other competitors are producing in China. The market for drill chucks is highly competitive and mostly driven by cost and quality. For the quality features this market is separated in to 3 segments, low, middle and high performance. Up to now we are only able to survive in the middle and high performance market. The low performance (highest volume) is lost complete to China. If the actual accepted Pb in steel would be not any more allowed, the cost situation could be become very critical, especially with the requirement of our main customers to reduce on a yearly base costs. With our actual experience after several internal tests with alternative materials (without Pb) show that we could not reach acceptable and comparable production costs. Also the alternative material without Pb is not really a standard in the market and one alternative is only produced be one steel mill. Another point will be the release process at our customer side, if we could change to alternative materials the release process could be more then one year and also the possible cost increase with steel without Pb will find not high acceptance at our customer base. There is a high risk, that then the drill cuck will not any more produced in Europe and the business will go to our competitors to China.

The RöhM company request that also further on the exemption 6 (a) would be valid.

4. Technical description of the exemption request / revocation request

(A) Description of the concerned application:

1. To which EEE is the exemption request/information relevant?

Name of applications or products:

RÖHM produce drill chucks for electrical and electronical tools (power tools like BOSCH, MAKITA, FEIN-Tools, Milwaukee, etc) RöhM is the last European drill chuck producer for power tools)

- a. List of relevant categories: (mark more than one where applicable)

- | | |
|---------------------------------------|-----------------------------|
| <input type="checkbox"/> 1 | <input type="checkbox"/> 7 |
| <input type="checkbox"/> 2 | <input type="checkbox"/> 8 |
| <input type="checkbox"/> 3 | <input type="checkbox"/> 9 |
| <input type="checkbox"/> 4 | <input type="checkbox"/> 10 |
| <input type="checkbox"/> 5 | <input type="checkbox"/> 11 |
| <input checked="" type="checkbox"/> 6 | |

- b. Please specify if application is in use in other categories to which the exemption request does not refer: XXXX

c. Please specify for equipment of category 8 and 9:

The requested exemption will be applied in

☐ monitoring and control instruments in industry

☐ in-vitro diagnostics

☒ other medical devices or other monitoring and control instruments than those in industry

e.g. This are specific drill chucks for applications in medical areas

2. Which of the six substances is in use in the application/product?

(Indicate more than one where applicable)

☒ Pb

☐ Cd

☐ Hg

☐ Cr-VI

☐ PBB

☐ PBDE

3. Function of the substance:

Pb in steel assure a good chip crack and smooth surface.

The Pb assure the heterogeneous finely divided Pb embeddings in the steel.

This also allow up 75% higher cutting speed and also assure more then a 2 times higher tool life. The Pb in steel is like a high effective grease to preserve the tool.

4. Content of substance in homogeneous material (%weight):

max 0,35% as mentioned in 6a

5. Amount of substance entering the EU market annually through application for which the exemption is requested:

Not relevant in the context for RÖHM, we purchase the raw material with allowed 0.35% Pb in europe

Please supply information and calculations to support stated figure.

XXXXX

6. Name of material/component: 11SMnPb 30; 16MnCrSPb 5 BG; C45 Pb + C

7. Environmental Assessment: _____

LCA: ☐ Yes

☒ No

(B) In which material and/or component is the RoHS-regulated substance used, for which you request the exemption or its revocation? What is the function of this material or component?

The raw material of the drill chuck body is used with 0,35% Pb. The function of Pb is to abet the machinability (cutting proberthy) of the drill chuck body. At this part we have massive machine processes. (see Nr. 3)

(C) What are the particular characteristics and functions of the RoHS-regulated substance that require its use in this material or component?

From our understanding the answer is the same like for (B)

5. Information on Possible preparation for reuse or recycling of waste from EEE and on provisions for appropriate treatment of waste

1) Please indicate if a closed loop system exist for EEE waste of application exists and provide information of its characteristics (method of collection to ensure closed loop, method of treatment, etc.)

Not relevant for RÖHM in this context, we don't produce the endproduct, the recycling of waste from EEE is under the responsibility of our customer.

2) Please indicate where relevant:

- ☐ Article is collected and sent without dismantling for recycling
- ☐ Article is collected and completely refurbished for reuse
- ☐ Article is collected and dismantled:
 - ☐ The following parts are refurbished for use as spare parts: _____
 - ☐ The following parts are subsequently recycled: _____
- ☐ Article cannot be recycled and is therefore:
 - ☐ Sent for energy return
 - ☐ Landfilled

⇒ Not relevant for RÖHM, we are only a component supplier.

3) Please provide information concerning the amount (weight) of RoHS substance present in EEE waste accumulates per annum:

- ☐ In articles which are refurbished _____
- ☐ In articles which are recycled _____
- ☐ In articles which are sent for energy return _____
- ☐ In articles which are landfilled _____

- ⇒ Not relevant for Röhm, we could not answer the question about the amount of weight in the EEE. In the complete drill chuck it will be between 0,1 and 0,2%.
 - ⇒ The drill chuck body have maximum 0,35%
-

6. Analysis of possible alternative substances

(A) Please provide information if possible alternative applications or alternatives for use of RoHS substances in application exist. Please elaborate analysis on a life-cycle basis, including where available information about independent research, peer-review studies development activities undertaken

We have carried out production tests with Pb free material (11SMn30). With this material the tests at the existing machines was not successful. (march 2019)

bad chip fracture behaviour (thread chips)

very high spindle stress at the machine (stability problems)

very high tool wear also with hard metal tools

Also we have carried out tests with embedding modified material (11SMn30 – EM + C). The results was not so bad as with the former material (july 2019)

not bad chip fracture behaviour

not bad machine stability

the lifetime with hard metal tools was not so bad, but no final conclusion possible about the cost impact of the hard metal tools

main critical point is up to now, that only one steel mill is producing this steel actually and this steel is up to now no standard, so that further increase in price from only one source and also the availableness in the market from different sources is a very high risk for the serial production of the last drill chuck producer in Europe for EEE.

It is actually not possible to increase the price for our drill chuck, the customer will switch for new projects directly to the Chinese competitor.

(B) Please provide information and data to establish reliability of possible substitutes of application and of RoHS materials in application

1. Possible substitute 11SMn30 => technical problems in production with the existing process => Production cost will increase, could not be compensated via price increase in the market.
2. Possible substitute 11SMn30 EM +C => seem to have less technical problem in production, but up to now only one source and final cost impact of tooling is not possible yet. Production test with more then 20000 drill

chuck bodies are too expensive and we could not be sure that customers will accept the new material with additional life time tests in our facility and normally also additional lifetime tests in the market with their EEE.

7. Proposed actions to develop possible substitutes

(A) Please provide information if actions have been taken to develop further possible alternatives for the application or alternatives for RoHS substances in the application.

Röhm is dependent on the steel mills that more of them bring substitute steels on the market which have the same behaviour like the actual existing steel with Pb. Up to now only one steel mill has implemented a special steel with embedding modified material.

(B) Please elaborate what stages are necessary for establishment of possible substitute and respective timeframe needed for completion of such stages.

more than one steel mill should have embedded modified material with comparable raw material cost as actual raw material in the market

the production cost must be minimum the same or better to be able to fulfill cost-saving targets from the customers (EEE mass produced article)

when the change takes place we need for this material change the release from our EEE customer

We have only the chance to change the material, when all customers will accept and release after the verification and validation process. If the main customers will not release we have the high risk to lose the complete business in Europe

8. Justification according to Article 5(1)(a):

(A) Links to REACH: (substance + substitute)

- 1) Do any of the following provisions apply to the application described under (A) and (C)?

- ☐ Authorisation
 - ☒ SVHC
 - ☐ Candidate list
 - ☐ Proposal inclusion Annex XIV
 - ☐ Annex XIV
- ☐ Restriction
 - ☐ Annex XVII
 - ☐ Registry of intentions
- ☐ Registration

- 2) Provide REACH-relevant information received through the supply chain.

Name of document:

Reach Information from RÖHM to the customer see the two attachments for global RÖHM products and a separate one for RÖHM drill chucks

(B) Elimination/substitution:

1. Can the substance named under 4.(A)1 be eliminated?

☐ Yes. Consequences?

☒ No. Justification:

Production costs will be increase

actual the specific material is only produced by one steel mill

customer could not accept the change

2. Can the substance named under 4.(A)1 be substituted?

☐ Yes.

- ☐ Design changes:
- ☐ Other materials:
- ☐ Other substance:

☒ No.

Justification:

Up to now we don't see the possibility that PB could be substituted by another material without any consequences to an increase of production cost.

3. Give details on the reliability of substitutes (technical data + information):

We don't have any clear informations on this point from raw material suppliers

4. Describe environmental assessment of substance from 4.(A)1 and possible substitutes with regard to

- 1) Environmental impacts: _____
- 2) Health impacts: _____
- 3) Consumer safety impacts: _____

⇒ Do impacts of substitution outweigh benefits thereof?

Please provide third-party verified assessment on this: _____

We don't have any third party assessment on this point, we don't produce the raw material.

(C) Availability of substitutes:

- a) Describe supply sources for substitutes:
raw material dealers in Germany
- b) Have you encountered problems with the availability? Describe:
Up to now we only get alternative possible material from one dealer (one steel mill)
- c) Do you consider the price of the substitute to be a problem for the availability?
☐ Yes ☒ No
- d) What conditions need to be fulfilled to ensure the availability?
There should be more then one steel mill wich produce comparable raw material to the now existing material with Pb.

(D) Socio-economic impact of substitution:

⇒ What kind of economic effects do you consider related to substitution?

- ☒ Increase in direct production costs
- ☐ Increase in fixed costs
- ☐ Increase in overhead
- ☐ Possible social impacts within the EU
- ☐ Possible social impacts external to the EU
- ☒ Other:

The acceptance of the customer of the increase of prices because of raw material changes could be very low.

⇒ Provide sufficient evidence (third-party verified) to support your statement: _____

9. Other relevant information

Please provide additional relevant information to further establish the necessity of your request:

10. Information that should be regarded as proprietary

Please state clearly whether any of the above information should be regarded to as proprietary information. If so, please provide verifiable justification:

XXXXX
