Committee for Risk Assessment

RAC

Annex 2

Response to comments document (RCOM)

to the Opinion proposing harmonised classification and labelling at EU level of

methyl acrylate; methyl propenoate

EC Number: 202-500-6
CAS Number: 96-33-3

CLH-O-0000006956-59-01/F

Adopted

18 March 2021

ANNEX 2 - COMMENTS AND RESPONSE TO COMMENTS ON CLH PROPOSAL ON METHYL ACRYLATE; METHYL PROPENOATE

COMMENTS AND RESPONSE TO COMMENTS ON CLH: PROPOSAL AND JUSTIFICATION

Comments provided during consultation are made available in the table below as submitted through the web form. Any attachments received are referred to in this table and listed underneath, or have been copied directly into the table.

All comments and attachments including confidential information received during the consultation have been provided in full to the dossier submitter (Member State Competent Authority), the Committees and to the European Commission. Non-confidential attachments that have not been copied into the table directly are published after the consultation and are also published together with the opinion (after adoption) on ECHA's website. Dossier submitters who are manufacturers, importers or downstream users, will only receive the comments and non-confidential attachments, and not the confidential information received from other parties. Journal articles are not confidential; however they are not published on the website due to Intellectual Property Rights.

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Substance name: methyl acrylate; methyl propenoate
EC number: 202-500-6
CAS number: 96-33-3
Dossier submitter: Austria

GENERAL COMMENTS

Date	Country	Organisation	Type of Organisation	Comment number
16.04.2020	Germany		MemberState	1
Comment received				
The purity in table 2 has to be replaced by 100 %, as the ideal substance should be evaluated.				
Dossier Submitter's Response				
No amendments in the original document are done at this stage of the process. However, it can be confirmed that the dossier refers to the pure substance methyl acrylate.				
RAC's response				
Noted.				

Date	Country	Organisation	Type of Organisation	Comment number
15.04.2020	United Kingdom	<confidential>	Company-Manufacturer	2
Comment received				
CLOSED LOOP SYSTEM AS A TECHNICAL ALTERNATIVE PROCESS OR PROCEDURE FOR SAFELY HANDLING METHYL ACRYLATE. It is very well recognized that closed loop system technology reduces the exposure of the operator below the threshold recommended by the EU as confirmed by our customers and the HSE study and that it is in agreement with the latest amended EU directives for CMD 2004 and in general with the (89/391/EEC) of 12 June 1989[2] and the 89/24/EC of 7 April 1998 ECHA note – An attachment was submitted with the comment above. Refer to public attachment METHYL ACRYLATE.pdf				

Dossier Submitter's Response
Thank you for the information on safe handling of methyl acrylate in closed loop systems. Information not relevant for the classification process and the intrinsic properties of the substance.
RAC's response
Noted.

OTHER HAZARDS AND ENDPOINTS – Acute Toxicity

Date	Country	Organisation	Type of Organisation	Comment number
24.04.2020	Belgium		MemberState	3

Comment received

Acute oral toxicity :
BECA disagrees with the proposed classification. All studies were reported in the CLH dossier with a reliability value of 3 or 4.
Three studies revealed LD50 which correspond to a classification in category 4 :
BASF AG (1958a)'s study, in rats, showed a LD50 of 768 mg/kg bw
Tanii and Hashimoto (1982)'s study showed a LD50 of 826 mg/kg bw
Latven (1993)'s study, in mouse, showed a LD50 of 840 mg/kg bw
However, other studies reported in the dossier are in favour of a classification in category 3.
Two studies, performed in rats and similarly to OECD TG 401, showed a LD50 of 300 mg/kg bw (Smyth and Carpenter, 1948) and a LD50 of 277 mg/kg bw (Paulet and Vidal, 1975).
A study in rabbits (Treon et al., 1949) reported a LD50 between 280 and 420 mg/kg bw, however the mortality at each dose level was 0/2, 0/4, 2/2, 1/1, 1/1 and 1/1, respectively at 120, 180, 280, 420, 620 and 1000 mg/kg bw. The number of animals used at each dose was too small to clearly define a LD50 however this result can be used in a weight of evidence approach.
Fassett (1963)'s study reported a LD50 of 200 mg/kg bw. No information was available regarding species.
Based on the results, BECA is of the opinion that a classification in category 3 cannot be dismissed. BECA is in favour of a classification in category 3 and an ATE of 277 mg/kg bw., as the rat is the preferred rodent specie.

Acute dermal toxicity :
Only studies with limited information were available (reliability of 3).
Smyth and Carpenter (1948)'s study reported a LD50 of 1250 mg/kg bw. No other LD50 was defined.
Based on the available information, BECA supports the proposal to classify as Acute Tox. 4. However, an ATE is difficult to define as the available LD50 cannot be verify as the information on mortalities, the substance's purity, the dose levels were not reported.
BECA is in favour of a generic ATE value of 1100 mg/k bw based on the CLP Regulation Annex I Table 3.1.2.

Acute inhalation toxicity :
BECA supports the proposal to classify as Acute Tox. 3 and the proposed ATE value of 3 mg/L.

Dossier Submitter's Response
Acute oral toxicity: Thank you for your discussion on this endpoint. The proposal for category 4 was build on the most reliable study (BASF, 1958) and supporting evidence. In our point of view a classification based on the Paulet (1975) is challenging as only a very limited number of animals was tested. An alternative approach may be the use of LD_{50} of 300 mg/kg bw derived by Smyth (1948). This would indicate Category 3 (borderline) and can be supported by studies from Treon (1949) and Paulet (1975). Then an ATE of 300 mg/kg bw has to be applied. However, based on the reliability and quality of data a classification in Category 4 is supported. Acute dermal toxicity: Based on the limited reliability of the available studies also a converted ATE of 1100 mg/kg bw can be supported. Acute inhalation toxicity: Thank you for your support.
RAC's response
Acute oral toxicity: Overall, most of the studies indicate a classification of category 4, with one study with an LD50 of 300 mg/kg bw on the boundary, and one study below 300, but with a small group size. Acute dermal toxicity Agreed with the proposal for a default ATE of 1100 mg/kg bw.

Date	Country	Organisation	Type of Organisation	Comment number
23.04.2020	France		MemberState	4
Comment received				
Acute toxicity by oral route: None of the available studies is reliable due to insufficient level of details (vehicle, purity of the substance) and/or methodological deficiencies (low number of animals tested). Most LD50 from relatively adequate studies are in the range of Category 4. Therefore, FR can agree with the classification proposal based on the dataset of very low quality. The generic ATE of 500 mg/kg is considered appropriate. Acute toxicity by dermal route: Most of the available studies are unreliable due to insufficient level of details and/or methodological deficiencies. Nevertheless, one study on rabbits could be considered adequate for the purpose of classification (several dose levels, although not specified, 6 animals per group). The LD50 from this study was in the range of Category 4. However, it is not clear why an ATE of 1250 mg/kg was chosen since all studies are rated with Klimisch score of 3. In this context, the generic ATE of 1100 mg/kg seems more appropriate. Acute toxicity by inhalation: LC50 from reliable studies are in the range of Category 3. Therefore, FR supports the proposal as category 3 with an ATE of 3 mg/L.				
Dossier Submitter's Response				
Acute oral toxicity: Thank you for your support.				

Acute dermal toxicity: Based on the limited reliability of the available studies also a converted ATE of 1100 mg/kg bw can be supported. Acute inhalation toxicity: Thank you for your support.
RAC's response
Acute dermal toxicity: Agreed with the default ATE of 1100 mg/kg bw based on the limited reliability of all studies.

Date	Country	Organisation	Type of Organisation	Comment number
16.04.2020	Germany		MemberState	5
Comment received				
Methyl acrylate is proposed for harmonised classification due to acute toxic effects after oral, dermal and inhalation exposure. The DE CA supports classification of methyl acrylate for acute oral toxicity category 4 (default ATE 500 mg/kg bw), acute dermal toxicity catego-ry 4 (ATE 1250 mg/kg bw) and acute inhalation toxicity category 3 (default ATE 3 mg/l, vapours). Supplementary notes: For the classification of acute oral toxicity the four relevant studies (similar to OECD test 401 in rodents or rabbits, reliability 3 based on the assessment of AU CA) indicate the classification in category 4 (LD50 768 mg/kg bw (BASF AG 1958); LD50 826 mg/kg bw (Tanii and Hashimoto 1982)) or category 3 (LD50 300 mg/kg bw (Smyth and Car-penter 1948); LD50 > 180 and < 280 mg/kg bw based on the mortality in the test of 0/4 at 180 mg/kg bw and 2/2 at 280 mg/kg bw (Treon et al. 1948). However, the study by Treon et al. in rabbits is based on very small animal size groups (maximum of two animals) and thus results are considered more uncertain. In contrast, the remaining studies are based on 4 to 10 ani-mal size groups in rats or mice. The result of the study by Smyth and Carpenter in rats yield exactly the border between the two categories. Overall, the studies mainly indicate classification in category 4.				
Dossier Submitter's Response				
Thank you for your support.				
RAC's response				
Noted.				

PUBLIC ATTACHMENTS
1. METHYL ACRYLATE.pdf [Please refer to comment No. 2]