Committee for Risk Assessment

RAC

Annex 2

Response to comments document (RCOM)

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

Bendiocarb

EC Number: 245-216-8

CAS Number: 22781-23-3

CLH-O-0000001412-86-51/F

Adopted

12 March 2015

ANNEX 2 - COMMENTS AND RESPONSE TO COMMENTS ON CLH PROPOSAL ON BENDIOCARB (ISO); 2,2-DIMETHYL-1,3-BENZODIOXOL-4-YL N-METHYLCARBAMATE

COMMENTS AND RESPONSE TO COMMENTS ON CLH: PROPOSAL AND JUSTIFICATION

Comments provided during public consultation are made available in this table as submitted by the webform. Please note that some attachments received may have been copied in the table below. The attachments received have been provided in full to the dossier submitter and RAC.

ECHA accepts no responsibility or liability for the content of this table.

Substance name: bendiocarb (ISO); 2,2-dimethyl-1,3-benzodioxol-4-yl N-methylcarbamate
CAS number: 22781-23-3
EC number: 245-216-8
Dossier submitter: United Kingdom

GENERAL COMMENTS

Date	Country	Organisation	Type of Organisation	Comment number
15.09.2014	France		MemberState	1
Comment received				
France agrees with the classification proposal for human health and the environment				
Dossier Submitter's Response				
Thank you for your comments.				
RAC's response				
Noted.				

Date	Country	Organisation	Type of Organisation	Comment number
12.09.2014	Germany		MemberState	2
Comment received				
The German CA supports the proposed classification and labelling of Bendiocarb. In addition we have one general comment: In Part B, section 1.3, Table 9 of the assessment report the unit for the water solubility value at pH 7 and 30 °C is missing.				
Dossier Submitter's Response				
Thank you for your comment, the water solubility at pH7 and 30°C is 0.38 g/l.				
RAC's response				
Noted.				

OTHER HAZARDS AND ENDPOINTS – Acute Toxicity

Date	Country	Organisation	Type of Organisation	Comment number
12.09.2014	Germany		Company-Manufacturer	3
Comment received				
The CLH proposal for bendiocarb is Acute Tox 2: H300, Acute Tox 2: H330, Acute Tox 3: H311, based on various acute toxicity studies conducted with bendiocarb. It is the position of the comment submitter that classification with Acute Tox 2: H300 is not appropriate and does not accurately reflect all the data available for the compound. As outlined in the				

submitted document, it is our opinion that a more appropriate classification for acute oral toxicity of bendiocarb is Acute Tox 3: H301.

For inhalation toxicity, it is likewise the opinion of the comment submitter that the proposed classification with Acute Tox 2: H330 is overly conservative. The acute inhalation study, while not deficient, was a whole-body study rather than the appropriate nose-only method. This undoubtedly resulted in exposure of the animals via both the oral and the dermal routes and to a dosage exceeding that calculated in the study. Thus, it is our opinion as outlined in the submitted document that a more appropriate classification for acute inhalation toxicity is Acute Tox 3: H331.

(ECHA note: The following attachment was provided [Attachment 1])

Regulatory Toxicology Position Paper - Response to CLH dossier for bendiocarb TC

Dossier Submitter's Response

Thank you for your comments. Our rationale for the proposed classification is outlined in the CLH report. We agree that the classification for inhalation toxicity is borderline.

RAC's response

On acute oral toxicity:

- There is no reason not to consider studies using corn oil as a vehicle. Although aqueous solutions are recommended, corn oil is considered as an appropriate vehicle in the OECD Acute oral toxicity test guidelines.
- The Guidance on the application of the CLP criteria (CLP guidance) clearly recommends not to average LD_{50} values coming from different studies and the calculation performed in the position paper for male rats over two different studies with glycerol formal as vehicle is not considered valid. In particular, it is not known whether both studies have been performed using the same rat strain, which may also influence sensitivity.
- LD_{50} values obtained in female rats with glycerol formal as vehicle are both below the 50 mg/kg threshold for classification as Acute Tox. 2; H300.
- Classification is further supported by LD_{50} in mice in the similar range, with glycerol formal or gum tragacanth as a vehicle as well, although with less weight given to the LD_{50} values attained in the studies in Guinea pigs, rabbits and cats.

On acute inhalation toxicity, it is noted that most of the deaths (1/1 death at 0.377 mg/L, 3/4 at 0.512 mg/L and 5/8 at 0.701 mg/L) occurred shortly after the start of exposure that is to say during the 4-hour exposure time. Because of this short latency, a contribution of exposure through grooming cannot be fully excluded, but it is considered to be lower than the respiratory exposure. Besides, at the macroscopic examination, congestion of the lungs was the principal finding in those animals that died before the end of the observation period, which provides some indication that mortality was linked to inhalation exposure. The calculated female LC_{50} is therefore considered appropriate to conclude on classification by inhalation. Statistical re-analysis of the dose-response however shows that an LC_{50} of 0.51 mg/L for females is obtained using the best statistical model to fit the data (PROAST software). This justifies classification as Acute Tox 3; H331.

Date	Country	Organisation	Type of Organisation	Comment number
15.09.2014	Belgium		MemberState	4
Comment received				

We support the new classification for the acute toxicity, both for the oral and dermal routes, based on the findings presented in the proposal :
☐ For the oral route : many studies are reported in the dossier, none of them are conforming to conventional test guidelines however the results can be considered as a weight of evidence for classification. In rats, LD50 are comprised between 25-156 mg/kg in males and 27-40 mg/kg in females. Same results are indicated for mice with a LD50 between 28-45 mg/kg. These results are within the range of the classification in category 2 (>5 and ≤50 mg/kg).
☐ For the dermal route : 2 studies indicate a LD50 of 566 and 800 mg/kg, these results are fulfilling the criteria for category 3 (>200 and ≤1000 mg/kg).

For the acute inhalation toxicity, a LC50 of 0.55 mg/l is indicated in the annex, in consistence with the rate of mortality revealed in the study (in the 0.377 mg/l exposure group, 1 female out of 5 died ; in the 0.512 mg/l exposure group, 2 female out of 5 died ; in the 0.701 mg/l group, 5 female on 5 died). This LC50 seems more representative than 0.47 mg/l as indicated in the CLH dossier (at 0.512mg/l only 2 female out of 5 died). Then, we do not support the classification and we are in favor of a classification in category 3 (LC50 between 0.5 and 1.0 mg/l).

Dossier Submitter's Response

Thank you for your comments. We agree that the classification for acute inhalation is borderline. All relevant information has been made available for RAC to deliver their opinion.

RAC's response

Your support for the Acute toxicity classification proposal via oral and dermal routes is noted.

For acute inhalation toxicity, it is noted that experimentally a 50% rate of mortality was not attained in females at the dose of 0.512 mg/L. However, the LC_{50} is a calculated value that also takes into account the steepness of the dose-response over all doses tested. Statistical re-analysis of the dose-response shows that an LC_{50} of 0.51 mg/L for females is obtained using the best statistical model to fit the data (PROAST software; for details, see RAC opinion). It justifies a classification as Acute Tox 3; H331.

OTHER HAZARDS AND ENDPOINTS – Hazardous to the Aquatic Environment

Date	Country	Organisation	Type of Organisation	Comment number
15.09.2014	France		MemberState	5

Comment received

Environmental hazards

FR agrees with the classification proposal for environmental hazards.

P.23 – "the available data from the bendiocarb CAR indicate that the substance has a low potential to bioconcentrate and hence bioaccumulate in fish" ☐ we should read "won't bioaccumulate in fish".

P.23 table 11a – for Salmo gairdneri could you precise that NOEC is based on larval growth, and for Daphnia magna could you precise that the NOEC is based on reproduction.

P.26 – In sections 5.4.1 to 5.4.4 it is stated "Not considered in the dossier" while it is just detailed before, please reword it.

Dossier Submitter's Response

Thank you for the clarifications, however the CLH report can not be updated at this stage.
RAC's response
Noted.

Date	Country	Organisation	Type of Organisation	Comment number
12.09.2014	Germany		MemberState	6
Comment received				
p.24, Table 11a: During commenting of the draft assessment report on Bendiocarb there was agreement that the ErC50 of 0.408 mg/L for the green algae Pseudokirchneriella subcapitata could not be considered as reliable (see comment 6 to Doc.III-A section 7 of the commenting table from March 2011). Therefore only the NOEC should be included in Table 11a of the CLH report.				
Dossier Submitter's Response				
Thank you for noting this, we concur that the ErC50 for *P. subcapitata* was considered unreliable during subsequent peer review of the CAR. However, as the ErC50 for algae is not a key endpoint for acute classification, disregarding this endpoint will not affect the overall classification proposal.				
RAC's response				
Noted and taken into account in the opinion.				

Date	Country	Organisation	Type of Organisation	Comment number
15.09.2014	Belgium		MemberState	7
Comment received				
Based on the results of the aquatic toxicity test on the most sensitive species Daphnia magna(48hEC50 = 0.038 mg/l, 21dNOEC=0.000882mg/l), the fact that the substance is considered as not rapidly degradable it is justified to classify, following the classification criteria of the regulation 1272/2008, as Aquatic Acute 1, H400 and Aquatic chronic 1, H410. Furthermore, the substance does not meet the criterion for bioaccumulation. In view of the proposed classification and toxicity band for acute toxicity between 0.01mg/l and 0.1mg/l, an M-factor for acute toxicity of 10 could be assigned and an M-factor for chronic toxicity of 100 (not rapidly degradable substance and toxicity band between 0.0001mg/l and 0.001 mg/l). In conclusion : we agree with the proposed environmental classification by the UK CA. Some editorial or/and minor comments : - We thank the UK CA for adding the non-confidential DocIIIA of the CAR in annex to the CLH report. This makes the CLH report a good stand-alone document which allows us to perform an objective evaluation of the hazards. One small suggestion that makes it easier to find the CAR section referred to: please refer in the CLH report also to the part of annex I e.g. hydrolysis ref. CAR Doc. IIIA Section A7.1.1.1, Annex I of the CLH report (study summaries) 004 - Abiotic degradation : Only the Campbell study (1988) is described in the CAR and CLH report. However it is mentioned on p.22 of the CLH report that two hydrolysis studies were performed. Is this a typo or was a second test performed? The major metabolite (NC 7312) in the Campbell study reached 87.9% at pH7 at 25°C instead of 20°C.				

- Please provide in the CLH report also a short summary on the environmental distribution (adsorption/desorption, volatilisation) of the substance.
Dossier Submitter's Response
Thank you for your comments and agreement. The suggestion for improved cross-referencing will be considered for future reports. With regards to hydrolysis, two studies were mentioned in Part A of the CAR (Part A, Section 4.1.1.1.1) however it appears that only the repeat study by Campbell, 1988 was relied upon. We agree the original hydrolysis study temperature was 25°C. The geometric mean K_{oc} value of 33.35 l kg^{-1} (ref. 4.1.2.1 in CAR) indicates that bendiocarb would not adsorb strongly to soil/sediments and suggests a high mobility in soil. Other studies at 4.1.1.2 also indicate that bendiocarb would primarily be associated with the water phase in effluent or other water/sediment systems. Section 4.1.1.2.4 indicates that volatilization is not expected to constitute a major dissipation pathway for bendiocarb.
RAC's response
Noted.

ATTACHMENTS RECEIVED:

1. Regulatory Toxicology Position Paper - Response to CLH dossier for bendiocarb TC, Submitted by a Company-Manufacturer on 12.09.2014 *[Please refer to comment number 3]*