ECHA
EUROPEAN CHEMICALS AGENCY

Committee for Risk Assessment

RAC

Annex 2

Response to comments document (RCOM)

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

BENZOVINDIFLUPYR (ISO); N-[9-(DICHLOROMETHYLENE)-1,2,3,4-TETRAHYDRO-1,4-METHANONAPHTHALEN-5-YL]-3-(DIFLUOROMETHYL)-1-METHYL-1H-PYRAZOLE-4-CARBOXAMIDE

EC number: -
CAS number: 1072957-71-1

CLH-O-0000001412-7-26/F

Adopted

04 December 2014

ANNEX 2 – COMMENTS AND RESPONSE TO COMMENTS ON CLH PROPOSAL ON BENZOVINDIFLUPYR (ISO); N-[9-(DICHLOROMETHYLENE)-1,2,3,4-TETRAHYDRO-1,4-METHANONAPHTHALEN-5-YL]-3-(DIFLUOROMETHYL)-1-METHYL-1H-PYRAZOLE-4-CARBOXAMIDE

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: benzovindiflupyr (ISO); N-[9-(dichloromethylene)-1,2,3,4-tetrahydro-1,4-methanonaphthalen-5-yl]-3-(difluoromethyl)-1-methyl-1H-pyrazole-4-carboxamide
CAS number: 1072957-71-1
EC number:
Dossier submitter: France

GENERAL COMMENTS

Date	Country	Organisation	Type of Organisation	Comment number
02.06.2014	Denmark		MemberState	1
Comment received				
We agree with the classification proposal				
Dossier Submitter's Response				
Noted				
RAC's response				
Noted				

Date	Country	Organisation	Type of Organisation	Comment number
12.06.2014	Germany		MemberState	2
Comment received				
The German CA supports the proposed classification and labeling. We agree with M-factors and concentration limits too.				
Dossier Submitter's Response				
Noted				
RAC's response				
Noted				

Date	Country	Organisation	Type of Organisation	Comment number
13.06.2014	Netherlands		MemberState	3
Comment received				
We agree with the proposed classification for environmental hazard by the dossier submitter.				
Dossier Submitter's Response				
Noted				
RAC's response				
Noted				

OTHER HAZARDS AND ENDPOINTS – Acute toxicity

Date	Country	Organisation	Type of Organisation	Comment number
13.06.2014	Finland		MemberState	4
Comment received				
We support the proposed classification as Acute Tox. 3; H301 and Acute Tox. 3; H331 for Benzovindiflupyr.				
Dossier Submitter's Response				
Noted				
RAC's response				
Noted				

OTHER HAZARDS AND ENDPOINTS – Hazardous to the Aquatic Environment

Date	Country	Organisation	Type of Organisation	Comment number
12.06.2014	Germany		MemberState	5
Comment received				
Page 58 ff chapter 5.3 Aquatic Bioaccumulation There is no explanation, why only one instead of two test concentrations as stated in the OECD guideline 305 was considered. Additionally the results of the BCF study with bluegill sunfish (York & Lentz, 2012) BCF steady state in whole fish of 76 L/kg (based on parent) and 407 L/kg (based on total 14-C residues) should to be corrected for lipid content of test fish (3.09 %) to BCF 123 L/kg and 659 L/kg (lipid normalized to 5% lipid content). The lipid normalized BCF of 123 L/kg is the relevant value for classification and labelling purposes, instead of 76 L/kg. This correction has no effect on the proposed classification and labelling of Benzovindiflupyr.				
Dossier Submitter's Response				
The BCF study (march 2012) was conducted to be in compliance with the guideline in place at the time of conduct of the study OECD 305 (1996). Therefore, revised OECD 305 (October 2012) could not be taken into account. OECD 305 (1996) stated that the BCF should only be corrected for lipid content "for high lipophilic substances" but no guidance was given on how this should be done. One of the changes from the revised OECD 305 (October 2012) is that fish lipid content should be measured so that BCF can be expressed on a 5% lipid content basis. The lipid content measured in the BCF study was 3.09 % therefore the normalization for a lipid content of 5% would have minimal impact on the BCF endpoint (BCF based on parent would be equal to 123 L/kg) which is always below triggers for bioaccumulation of 500 (criterion for bioaccumulating potential according to Regulation EC 1272/2008). Even if there is no significant difference, the normalized value of 123 L/kg could be considered for the classification proposal. Agrees that only one instead of two concentrations as stated in the OECD guideline 305 (1996) was considered without justifying this approach. However, one of the other main changes from the revised OECD 305 (October 2012) is that the testing of only one test concentration can be considered sufficient, when it is likely that the bioconcentration factor (BCF) is independent of the test concentration. More precisely it is reported "*The test was originally designed for non-polar organic substances. For this type of substance, the exposure of fish to a single concentration is expected to be sufficient, as no concentration effects are expected. […] If only one concentration is tested, justification for the use of one concentration should be given. Also, the tested concentration should be as low as is practical or technically possible (i.e. not close to the solubility limit)*". Solatenol is a non-polar substance (log Kow=4.3, solubility=0.98 mg/L), moreover the targeted nominal				

concentration tested of 0.26 µg/L is well below the solubility limit. We agree that such a justification should be added in our proposal because in these conditions, one concentration is justified and considered sufficient.

RAC's response

Regarding normalization in the BCF study, it is agreeable that, in this specific case, lipid normalization will have a minimum impact on the BCF endpoint but normalization to lipid content is one way to reduce variability when comparing measured BCFs. Some indications for normalization are indicated in the *Endpoint Specific Guidance R.7c* within the "Correction factors" section in the chapter R.7.10.4. A default value of 5% is mostly commonly used as this represents the average lipid content of the small fish used in OECD 305.

Lipid normalization should be done where data are available, except for cases where lipid is not the main compartment of accumulation. According to the OECD 305 requirements, a 3.09% of lipid content was determined for the fish used in the test, and therefore, normalization of the BCF to 5% of lipid content seems to be appropriate even although this indications were not considered in the guidance according with the test was conducted.

Therefore, the normalized BCF of 123 L/kg should be considered relevant and applied for classification and assessment or other assessment purposes.

Regarding the use of one concentration instead of two concentrations, additionally for the agreement it should be indicated that, according to the OECD 305 guideline, the concentration tested is well below the water solubility established for the substance.

Date	Country	Organisation	Type of Organisation	Comment number
13.06.2014	Belgium		MemberState	6

Comment received

We would like to thank ANSES for the well prepared environmental part of the CLH dossier.

Based on the results of the aquatic toxicity test on the most sensitive species (fish : Cyprinus carpio with 96hEC50 = 0.0035 mg/l, Pimephales promelas with 32dNOEC= 0.00095mg/l), the fact that the substance is 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 H410 . Furthermore, the substance doesn't meet the criteria for bioaccumulation.

In view of the proposed classification and toxicity band for acute toxicity between 0.001mg/l and 0.01mg/l, an M-factor for acute toxicity of 100 could be assigned and an M-factor for chronic toxicity of 100 (not rapidly degradable substance and toxicity band between 0.0001mg/l and 0.001mg/l).

In conclusion: we agree with the proposed environmental classification by ANSES.

Just one minor question :
Was the BCF corrected for growth dilution and lipid content?

Dossier Submitter's Response

The BCF value of 76 L/kg is not corrected for growth dilution and lipid content. However, the BCF study (march 2012) was conducted to be in compliance with the guideline in place at the time of conduct of the study OECD 305 (1996). Therefore, revised OECD 305 (October 2012) could not be taken into account.

OECD 305 (1996) stated that the BCF should only be corrected for lipid content "for high lipophilic substances" but no guidance was given on how this should be done. One of the changes from the revised OECD 305 (October 2012) is that fish lipid content should be measured so that BCF can be expressed on a 5% lipid content basis. The lipid content measured in the BCF study was 3.09 %

therefore the normalization for a lipid content of 5% would have minimal impact on the BCF endpoint (BCF corrected for lipid content would be equal to 123 L/kg).

OECD 305 (1996) did not state that the BCF should be corrected for growth dilution. One of the changes from the revised OECD 305 (October 2012) is that fish weight should be measured so that $BCF_{kinetic\ (k)}$ can be corrected for growth dilution. It is also stated that $BCF_{steady\ state\ (ss)}$ will also be influenced by growth, but it is reported that no agreed procedure is available to correct a BCF_{SS} for growth. As it is BCF ss that was retained as BCF endpoint for classification and no agreed procedure is available to correct a BCF_{SS} for growth, it was not corrected. Moreover, in the guideline it is also stated that the resulting BCF ss is doubtful if the BCF_K is significantly larger than the BCF_{ss}, as this can be an indication that steady state has not been reached or growth dilution and loss processes have not been taken into account. In the BCF study, BCF_K of 374 L/kg (not corrected for growth dilution) was consistent with BCF ss of 407 L/kg.

Therefore, it is considered that the non-corrected BCF value is considered reliable and sufficiently robust for classification.

RAC's response

In this case, at least lipid correction should be taken into account. See RAC´s response to comment number 5 for rationale…

Date	Country	Organisation	Type of Organisation	Comment number
13.06.2014	Sweden		MemberState	7

Comment received

The Swedish CA support the conclusion by the French CA that classification of Benzovindiflupyr as Aquatic Acute 1(H400) with an M factor of 100, and Aquatic Chronic 1(H410) with an M-factor of 100 is warranted based on data showing acute and long-term toxicity to fish and the fact that Benzovindiflupyr is not rapidly biodegradable.

Dossier Submitter's Response

Noted

RAC's response

Noted

Date	Country	Organisation	Type of Organisation	Comment number
13.06.2014	Netherlands		MemberState	8

Comment received

Relevant details on degradation/ transformation studies are missing or unclearly defined (see below). In the so-called modified system, losses due to sorption/ re-distribution are not clearly separated from actual degradation of the compound. In addition, the time frame of the (primary) degradation is unclear.
Suggestions for clarification: .

Environmental Fate and transport
• p. 53 table 24:
For the water sediment studies ((Ferguson H & Lowrie C (2012) and Lowrie C & Ferguson H (2012)) we assume that the DT rates refer to primary degradation as the compound is not readily degradable and mineralization percentages are not provided. Please clarify by mentioning the amount of mineralization (and at time interval)

• P. 53 table 24: Please clarify whether DT50 values >100 days are within the measured time frame of the experiment or extrapolated from the data.

• P. 55 Please clarify whether DT50 values >100 days are within the measured time frame of the

experiment or extrapolated from the data.

• P. 55 Eight (one but last) section; last section; and p.56 fourth section; please specify "modified". ("In modified (incubation) systems….") Does this refer to the addition of algae and macrophytes and/ or anything else?

• P. 55 Last section. Please add when the biotransformation products were measured. It will not change the C&L, but this is an important parameter to obtain insight in the persistency. We would like to know if these transformation products are measured in the beginning or end, i.e. at which day specifically.

• P. 56 Fourth section. Please add when the biotransformation products were measured. It will not change the C&L, but this is an important parameter to obtain insight in the persistency. We would like to know if these transformation products are measured in the beginning or end, i.e. at which day specifically.

• P. 56 last section of 5.1.2 "However, … degradation of benzovindiflupyr was significantly faster." This is also stated in table 24, p.53 for the water sediment studies ((Ferguson H & Lowrie C (2012) and Lowrie C & Ferguson H (2012)) and later on in paragraph 5.5 p. 74.
This sentence is vague. It is not specified how much faster or how significant. This will not change the classification, but please 1st clarify significantly. 2nd clearify whether degradation means full degradation (mineralization) or primary/partial degradation. 3rd As total system DegT50 are high (both studies >80% of parent compound left at end of study and in modified system DegT50 ≥ 40 days) it seems inappropriate to say that degradation was faster, rather it is a re-distribution of the parent compound. Please comment on this.

• P. 57 Please specify when the metabolites were measured during the test.

Ecotoxicity

• P. 73 Fourth section says "20day LC50 and EC50 for larval survival and growth respectively, were >48 mg/kg dry weight…" Two endpoints, but only one value mentioned, please clarify.

Dossier Submitter's Response

The following clarifications can be provided:

Environmental Fate and transport

• p. 53 table 24: In the water/sediment systems under dark aerobic conditions, mineralization ranged between 0.1 and 0.3% after 100 days. In the water/sediment systems under dark anaerobic conditions, mineralization ranged between <0.1 and 0.2% after 100 days.

• P. 53 table 24: Duration of water/sediment studies was 100-102 days. Therefore, DT_{50} over this period are extrapolated.

• P. 55: Duration of water/sediment studies was 100-102 days. Therefore, DT_{50} over this period are extrapolated.

P. 55: Eight (one but last) section; last section; and p.56 fourth section: The term "modified incubation system" correspond to the water/systems incubated in a light/dark cycle with algae or macrophytes.

P. 55 Last section: With phenyl label, metabolite SYN546039 reached a maximum of 16.5% AR in total system after 14 days in systems containing algae and 16.8% AR in total system after 30 days in systems containing macrophytes. Metabolite SYN546040 reached a maximum of 1.2% AR in total system after 45 days in systems containing algae and 8.7% AR in total system after 7 days in systems containing macrophytes.

• P. 56 Fourth section: With pyrazole label, metabolite SYN546039 reached a maximum of 11.3% AR in total system after 100 days in systems containing algae and 19.5% AR in total system after 100 days in systems containing macrophytes. Metabolite SYN546040 reached a maximum of 6.6% AR in total system after 14 days in systems containing algae and 11.8% AR in total system after 7 days in systems containing macrophytes. Metabolite NOA449410 reached a maximum of 8.7% AR in total system after 46 days in systems containing algae and 4.9% AR in total system after 14 days in systems containing macrophytes. Metabolite SYN546648 reached a maximum of 3.6% AR in total system after 100 days in systems containing algae and 5.4% AR in total system after 100 days in systems containing macrophytes.

• P. 56 last section of 5.1.2: In systems with algae, DT_{50} for total system ranged between 83 and 283 days; dissipation rates from the water column ranged between 3.9 and 6.7 days. In systems with macrophytes, DT_{50} for total system ranged between 42 and 69 days; dissipation rates from the water column ranged between 2.4 and 5.4 days.
For total system, degradation corresponds to the disappearance of Benzovindiflupyr from total system (by microbial or chemical processes). Dissipation rates from water column corresponds both to adsorption on sediment and degradation of benzovindiflupyr (by microbial or chemical processes).
When comparing DT_{50} values in total system for standard aerobic and anaerobic systems on one hand and for systems containing algae or macrophytes on the other hand, it is confirmed that degradation is faster in systems containing algae or macrophytes than degradation in standard systems (where very few degradation occurred).

• P. 57: SYN546039 reached a maximum of 19.5% AR after 100 days and SYN546040 reached a maximum of 11.8% AR after 7 days.

Ecotoxicity
Based on mean measured sediment concentrations, the 20-day LC50 and EC50 for larval survival and growth, respectively, were estimated to be both >48 mg/kg dry weight.

RAC's response

Additional information will be included for clarification.