Committee for Risk Assessment

RAC

Annex 2

Response to comments document (RCOM)

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

Fipronil (ISO)

EC Number: 120068-37-3
CAS Number: 424-610-5

CLH-O-0000001412-86-53/F

Adopted

05 June 2015

ANNEX 2 - COMMENTS AND RESPONSE TO COMMENTS ON CLH PROPOSAL ON FIPRONIL (ISO)

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: fipronil (ISO); 5-amino-1-[2,6-dichloro-4-(trifluoromethyl)phenyl]-4-[(trifluoromethyl)sulfinyl]-1H-pyrazole-3-carbonitrile
CAS number: 120068-37-3
EC number: 424-610-5
Dossier submitter: France

GENERAL COMMENTS

Date	Country	Organisation	Type of Organisation	Comment number
05.11.2014	Germany	BASF SE	Company-Manufacturer	1

Comment received

Introduction and background

Fipronil is registered as an active substance under the Biocide Regulation EC 528/2012 and also as an active substance under the Plant Protection Product Regulation EC 1107/2009.
The harmonised classification of fipronil was first introduced in the 30th ATP (Directive 2008/58/EC) of Dangerous Substance Directive 67/548/EEC based on the assessment of fipronil under the PPP regulation.
This statement addresses the changes in the environmental classification proposed by RMS France in the 2014 CLH draft report. The RMS France proposes to base the classification on data from the public literature, i.e. a publication of Weston and Lydy (2014); erroneously referred to as 'American Chemical Agency'. BASF does not agree with this proposal for several reasons detailed below.

An additional point to comment is the correct determination of the sediment NOEC from the chronic Chironomus riparius spiked sediment test (OECD TG 218).

Formal points

It is crucial that classification and labelling are based on studies of high reliability and relevance.
Reliability: Some studies were marked with reliability indices (e.g. in Table 9 on page 12 of the CLH report). However, it is not clear which criteria were used to assess the reliability. It would be very helpful if the criteria or a reference thereto (e.g. Klimisch et al. (1997) if this reference was used) were included in the document and if a reasoning for setting certain reliability indices would be provided. Further, an explanation is needed why the reliability of some studies was assessed while others, including literature data, were not.

Relevance: "Preferably data shall be derived using standard test methods referred to in Article 8(3). In practice data from other standardized test methods such as national methods shall also be used where they are considered as equivalent. Where valid data available from non-standard testing and from non-testing methods, these shall be considered in classification provided they fulfil the requirements specified in section 1 of Annex XI to Regulation (EC) No 1907/2006" (paragraph 4.1.1.2.2 Annex I, Part 4 of EC 286/2011). In EC 1907/2006 article 13 further information is given with regard to usable data ("Ecotoxicological and toxicological tests and analyses shall be carried out in compliance with the principles of good laboratory practice provided for in Directive 2004/10/EC or other international standards "). Thus, non-GLP data could potentially be used in the assessment if they followed internationally accepted guidelines.

ANNEX 2 - COMMENTS AND RESPONSE TO COMMENTS ON CLH PROPOSAL ON FIPRONIL (ISO)

(ECHA note: The following attachment was submitted with this comment. The contents of the attachment are copied in this table.)

Comments on "CLH report – Proposal for Harmonized Classification and Labelling of Fipronil"

Dossier Submitter's Response

FR (12/2014): the reliability indexes mentioned in the table 9 are issued from the assessment carried out in the biocide dossier and review under BPD for the inclusion of fipronil in Annex I of directive 98/8/CE. The criteria used for these indexes are in accordance with the Klimisch criteria used for ecotoxicology section. The studies where no RI is indicated are issued from the pesticides dossier as indicated in the footnote (*) of the table. In the frame of pesticide review, RMS indicates if the study is acceptable or not without given an RI. In the table 9, all studies without RI are assess under pesticide review and are considered valid under this review process.

RAC's response

Article 5 of the CLP Regulation states that new scientific information shall be used in determining whether the substance entails a hazard as set out in Annex I and therefore the reliability of the Weston & Lydy (2014) article is decisive.

Date	Country	Organisation	Type of Organisation	Comment number
07.11.2014	Germany		MemberState	2

Comment received

The German CA supports the proposed classification as Aquatic acute 1 - H400 Aquatic chronic 1- H410 with M-factor acute 10000 for Fipronil.
Nevertheless the German CA disagrees with the dossier submitter that a re-consideration of the Acute Toxicity database is not required and the approach that "resources would not be allocated for digging into the acute data."
Justification: The toxicity database for Fipronil has recently been re-assessed in the biocides review programme and the results are available. The results show, that with application of the CLP criteria, the resulting C&L for acute inhalation toxicity is Acute Tox 2, H330 rather than Acute Tox 3, H331 as proposed by the dossier submitter based on the conversion table. Notably, some self-classification in the inventory already reflects the change in criteria (see comment on page 9, 2.4). Therefore, the harmonisation of C&L in accordance with CLP Regulation Article 36(2) should include Health Hazard endpoints.

Page 9, 2.4 Current self-classification and labelling: it is noted that some entries in the C&L inventory include a classification as Acute Tox 2 with H330. In fact, this classification reflects the correct classification when based on CLP criteria and the available toxicity data. It contrasts with the proposal to translate the previous DSD classification using the conversion table into Acute Tox 3, H331. Therefore, classification for Acute Toxicity clearly has to be considered in the CLH Dossier.

Dossier Submitter's Response

FR (12/2014): There was no resource allocated to develop this endpoint. Nevertheless, German MS proposal for acute inhalation toxicity as Acute Tox 2, H330 according to toxicity data available and CLP criteria could be discussed at the RAC level.

RAC's response

Thank you for the comments. See the ODD Document for environmental classification. Only the endpoints proposed by the Dossier Submitter are handled in the RAC's opinion.

Date	Country	Organisation	Type of Organisation	Comment number
10.11.2014	Austria		MemberState	3

Comment received

The CLH-report refers only to ecotoxicological classifications.

We noticed however that the classification for acute toxicity was translated from DSD to CLP using the 'minimum classification approach'.

We agree with the proposed classification for oral and dermal acute toxicity as:
Acute Tox 3* - H301
Acute Tox 3* - H311

For acute inhalation toxicity, the correct classification is:
Acute Tox 2 -H330
(based on LC50 in rats of 0.39mg/L, see EFSA Scientific Report (2006) 65, 1-110, Conclusion on the peer review of fipronil provided as attachment)

The comments were prepared by the Austrian Agency for Health and Food Safety, Inst. for Plant Protection Products, Division of Toxicology.

(ECHA Note: The following attachment was submitted with the above comment [Attachment 1])

Conclusion regarding the peer review of the pesticide risk assessment of the active substance fipronil. Finalised: 3 March 2006 (Filename: Fipronil_EFSA_conclusion_final_rev1.doc)

Dossier Submitter's Response

FR (12/2014): Thanks for your comment, see answer above

RAC's response

Thank you for the comments. Only the endpoints proposed by the Dossier Submitter are handled in the RAC's opinion.

OTHER HAZARDS AND ENDPOINTS – Physical Hazards

Date	Country	Organisation	Type of Organisation	Comment number
05.11.2014	Germany	BASF SE	Company-Manufacturer	4

Comment received

Acute freshwater data
It is proposed by the RMS France to base the classification on a literature study with *Chironomus dilutus* (Weston and Lydy, 2014) reporting a 96h-EC_{50}. In Table 9 (page 21) of the CLH report the results are cited as "Recent study from American Chemical Agency". This citation is misleading since it implies that this study was conducted by an authority, which is not the case. Instead, the authors are from academia and the results were published in a scientific journal, 'Environmental Science & Technology' published by the American Chemical Society. Beside the low scientific reliability of this study, it is not in line with the data requirements for classification and labelling. Both points are further elaborated below.

Specific data requirements for ecotoxicology are laid down in Annex I, Part 4 of EC 286/2011 (Criteria revised in Commission Regulation (EU) No 286/2011, amending EC 1272/2008). There it is clearly stated that the relevant categories for the estimation of the acute hazard are:
- 96 hr LC_{50} (for fish)
- 48 hr EC_{50} (for crustaceans)
- 72 or 96 hr E_rC_{50} (for algae or other aquatic plants)

1. For invertebrates it is explicitly stated that classification should be based on crustaceans. Therefore, data on other invertebrates like insects might be used as additional information (the regulation is not very clear about this point) but should not be considered for classification.

2. Weston and Lydy (2014) assessed the toxicity of Fipronil to 14 macroinvertebrate species. Beside the fact that the study was not conducted under the general principles of GLP, basic information that would be required to judge on the reliability of a study is missing (e.g. the test item is not

characterized, unclear where the test species were collected and if the sites were contaminated or not). Tests were conducted over 96 hours, which is longer than the 48 hours recommended in the relevant OECD TG for invertebrates. In addition, in the specific data requirements it is stated that toxicity measured after 48 hours is relevant for classification and labelling. The actual concentrations were only measured in one treatment near the EC_{50}. Since the raw data are missing the fitted dose-response function as well as the calculated EC/LC_{50} values cannot be verified. Although some of the species were non-standard test species the poor performance of control animals leads to the conclusion that this study is not reliable. For example for *Fallceon quilleri* the control survival was only 77%. For The *C. dilutus* the control survival was 83 and 87% which in one case is below the threshold of validity (i.e. 85%) according to OECD TG 235 (2011). Further, acute tests with chironomids should have a test duration of 48 hours and feeding, which was employed by Weston and Lydy (2014), is not allowed.
Overall, the study published by Weston and Lydy (2014) has weaknesses in test design and reporting. Especially the tests with *F. quilleri* and *C. dilutus*, which are neither conducted in accordance with international guidelines nor meet generally agreed validity criteria, should not be considered as reliable.
As valid GLP data on *C. dilutus (= C. tentans)* are available (BASF DocID 2003/1022432) these should be preferred if insect data are used at all. As stated above for invertebrates data on crustaceans should primarily be used for classification and labelling. For crustaceans valid acute and chronic GLP studies with *Daphnia magna* and *Mysidopsis bahia* are available.

In general, for the acute assessment data on algae should be recalculated to 72 or 96 hour endpoints and for algae and aquatic plants growth rate should be used. Growth rate is to be preferred over the endpoint biomass or yield because biomass/yield is dependent on a number of variables influencing the result (e.g. species specific maximum intrinsic growth rate, test conditions, duration of the experimental phase). The parameter growth rate, however, is independent of these factors and may thus be used for comparison between species, and for modelling and for extrapolation to other situations than those specific ones of the respective laboratory studies. Accordingly, the OECD TG 201 (2011) acknowledged the preferred use of growth rate over biomass or yield.

Following Annex I, Part 4 of EC 286/2011 the classification for acute should be based on *M. bahia* with LC_{50} (48 h) = 0.00017 mg/L (BASF DocID R010494). As this value is in the range of 0.0001 – 0.001 mg/L the M-factor is 1000.

3. Chronic freshwater data

According to Annex I, Part 4 of EC 286/2011 the relevant categories for the estimation of the chronic hazard are:
- Chronic NOEC or ECx (for fish)
- Chronic NOEC or ECx (for crustaceans)
- Chronic NOEC or ECx (for algae or other aquatic plants)

Based on the data requirements data on crustaceans should be used for classification and labelling. For Fipronil GLP and guideline compliant studies on crustaceans (i.e. *D. magna* and *M. bahia*) are available and should preferentially be used instead of data on insects.

Following Annex I, Part 4 of EC 286/2011 the classification for chronic should be based on *M. bahia* with NOEC (28 d) = 0.0000077 mg/L (BASF DocID R010517). This value is in the range of 0.000001 – 0.00001 mg/L and as Fipronil is not readily biodegradable this leads to an M-factor of 10,000.

4. Chronic sediment data

Chronic sediment data are not used for classification and labelling purposes. However, they can complete the toxicity profile of a substance. For the study with *Chironomus riparius* (BASF DocID 2009/1122509) the endpoint should be given as the initial measured concentration. This is in accordance with OECD TG 218 (2004): *"Effect concentrations expressed and based on dry weight, are calculated preferably based on measured sediment concentrations at the beginning of the test"*. Therefore, for the C. riparius GLP test, the correct NOEC based on initial measured concentrations is 1.61 µg/kg.

Conclusion

Based on the data for Fipronil the following M-factors are proposed:
- M-factor acute 1000 based on *M. bahia* 48-h LC50
- M-factor chronic 10 000 based on *M. bahia* 28-d NOEC

References

- Klimisch, H.J., Andreae, M. and Tillmann, U. (1997) A systematic approach for evaluating the quality of experimental toxicological and ecotoxicological data. Reg. Tox. Pharmacol. 25, 1-5.
- Weston, D.P., and Lydy, M.J. (2014) Toxicity of the insecticide Fipronil and its degradates to benthic macroinvertebrates of urban streams. Environ. Sci. Technol. 48, 1290 -1297.

(ECHA note: The following attachment was submitted with this comment. The contents of the attachment are copied in this table.)

Comments on "CLH report – Proposal for Harmonized Classification and Labelling of Fipronil"

Dossier Submitter's Response

1. FR (12/2014): Data on chironomus have already been used for classification when available studies showed that this specie is more sensitive than usual aquatic organisms (cf. Margosa extract).

2. FR (12/2014): We agree that study carried out by Weston and Lydy (2014) follows a non-normalised protocol as we mentioned in the CLH report. However, a literature database on the acute toxicity of fipronil to aquatic invertebrates (Chironomidae, Culicidae and Decapoda) coming from published scientific papers, which are not GLP, provide valuable additional information: the LC_{50} (48 or 96h) were in the range of 0.30 to 23 µg a.s. /L and the lowest acute endpoints were observed for some Chironomidae and Culicidae. The whole set of data from GLP studies along with the information from the scientific literature clearly shows that insects are undoubtedly the most sensitive taxonomic group.

We considered that the available information about the Weston and Lydy (2014) study are sufficient to take into account the result which is 10 time lower than the most sensitive endpoint coming from GLP study (EC_{50}(96h) = 0.14 µg/L for *Mysidopsis bahia*). Indeed, this Weston and Lydy (2014) study was carried out in spiked water system with *Chironomus dilutus* obtained from laboratories cultures maintained at the University of California Berkeley.
Concerning the effect of survival, the author (exchanges dated from 26/06/2014) explains that "no effect on survival at 96 h at the highest fipronil concentrations tested. They could barely move, but not dead." So, MSCA considers that the control survival of 83 and 87% have no impact on the reliability of the study.
Moreover, as indicated in the publication "Water from a concentration step near the expected EC50 based on preliminary tests was analyzed by methods described [below] for verification of initial pesticide concentration, with compositing solutions prepared on days 0 and 2." It is also mentioned that "Actual concentrations were near nominal (median 95% of nominal; range 66−131%), but all data were adjusted to reflect actual initial concentrations."
It could also be noted that 2 tests at 23°C were performed with *Chironomus dilutus* which give similar results: 30.0 ng/L (95% confidence interval = 23.3−36.0) and 35.0 ng/L (21.1−41.5)
And 2 additional tests were performed at different temperatures (13 and 18°C) which give the following results: 39.7 ng/L (33.0−48.5), and 53.3 ng/L (48.4−58.7) respectively. No effect of temperature was observed in these additional tests and results with the same order of magnitude are obtained in these 4 tests.
Exchanges with the author (dated from 26/06/2014) complete the information about the concentrations: he explained us that "they did a lot of preliminary range finding with lots of different concentrations, but the definitive tests (at 23°C) that went into the paper were done from 5-80 ng/L nominal (actual conc. just slightly less), with factor of 2 steps. For the lower temperature tests (13°C, 18°C), when we hadn't done preliminary tests and were less confident where the effects concentrations would lie, we went from 4-256 ng/L nominal".

The EC_{50} and LC_{50} values could be derived using Probit analysis and CETIS software (Tidepool

Scientific Software, McKinleyville, CA).
Valid GLP study proposed by BASF SE (BASF DocID 2003/1022432) corresponds to "Fipronil – Toxicity to midge (*Chironomus tentans*) during a 10-day sediment exposure". This study is a spiked sediment study carried out during 10 days sediment exposure. In this study, the 10-day LC_{50} values for midge survival are 30 µg/kg sediment and 0.43 µg/L pore water. However, MSCA considers that the exposure way of this study is not adapted for classification and labelling but only for risk assessment.

Therefore, MSCA FR maintains its initial proposal to use the study of Weston and Lydy (2014) to derive the M-factor of 10,000 for aquatic acute classification.

3. FR (12/2014): We agree with the comment of BASF SE that available data lead to state that 28d-NOEC = 0.0077 µg/L value should be used for classification and derivation a chronic M-factor. This corresponds to the CLH report.

4. FR (12/2014): the study mentioned by BASF SE (BASF DocID 2009/1122509) corresponds to "Chronic toxicity of BAS 350 I (Fipronil) to the non-biting midge *Chironomus riparius* - a spiked sediment study". This study is a spiked sediment study carried out during 28 days sediment exposure. MSCA considers that the exposure way of this study is not adapted for classification and labelling but only for risk assessment.

RAC's response

1. Regarding the use of Chironomus data RAC refers to the CLP Regulation stating that fish, crustacean and algae are considered as surrogate for all aquatic organisms and data on other species shall also be considered it the test methodology is suitable. The Guidance on the Application of the CLP Criteria further states that "Valid data for short- and long-term tests on other species at the same trophic level shall also be considered, provided they are equivalent in terms of species relevance, testing conditions and test endpoints." Furthermore as Fipronil is an insecticide, aquatic insect data are relevant in this case.
2. Please see the RAC opinion where the reliability of the Weston & Lydy (2014) Chironomus test is assessed. Test result LC_{50} (48 h) = 0.00017 mg/L for Mysidopsis is not mentioned in the CLH Report.
3. RAC agrees that 72 hours is the preferred test duration for algae. Results from a 96 hours test can be used if the growth increases exponentially throughout the whole test period in the control cultures. Growth rate is preferred in algae test but in case of the fipronil CLH Report, this kind of result is not available.
4. RAC agrees with the Dossier Submitter.

OTHER HAZARDS AND ENDPOINTS – Acute toxicity

Date	Country	Organisation	Type of Organisation	Comment number
07.11.2014	Germany		MemberState	5

Comment received

Page 4-5, Table 2 and Page 15, chapter 4: Proposed and resulting CLH should include
-for acute oral toxicity, based on a LD50 of 97 mg/kg bw in rats (M: 92, F:103) and similar values in mice according to the biocide assessment report: Acute Tox 3, H301;
-for acute dermal toxicity, based on a LD50 of 445 and 354 mg/kg bw in male and female rabbits, respectively, according to the biocide assessment report: Acute Tox 3, H311;
-for acute inhalation toxicity, based on a LC50 of 0.36 and 0.42 mg/L in male and female rats, respectively, according to the biocide assessment report: Acute Tox 2, H330.
Another available acute inhalation toxicity study (Cracknell, 1991, Report No. 90/RHA358/0791) with a reported LC50 value of 0.68 mg/L just above the classification limit for Acute Tox 2 of 0.5 mg/L for dusts was not considered applicable due to insufficient respirability of the tested aerosol (large particle size).

Dossier Submitter's Response

FR (12/2014): There was no resource allocated to develop this endpoint. Nevertheless, German MS proposal for acute inhalation toxicity as Acute Tox 2, H330 according to toxicity data available and CLP criteria could be discussed at the RAC level.

RAC's response

Thank you for the comments. Only the endpoints proposed by the Dossier Submitter are handled in

the RAC's opinion.

OTHER HAZARDS AND ENDPOINTS – Organ toxicity Repeated Exposure

Date	Country	Organisation	Type of Organisation	Comment number
07.11.2014	Germany		MemberState	6

Comment received

Page 4-5, Table 2, Resulting Classification: The footnote ** to H372 "route of exposure not specified as the necessary information is not available (conversion of DSD classification)" should be deleted. A route of exposure is only specified, if there is convincing evidence that the effect is route specific. In a situation where it is unknown whether the effect would occur through other routes of exposure, no route would be specified. Please refer to the Guidance on the Application of the CLP criteria Table 3.9.2.4.1 Inclusion of routes of exposure in Hazard Statement. The data presented in the biocides Competent Authority Report indicates that neurotoxicity may occur not only following repeated/prolonged oral exposure but also through the dermal route (LOAEL of 10 mg/kg bw/d x 21 days = below Cat.1 classification limit of 60 mg/kg bw/d for subacute dermal studies, rf. to Table 3.9.2.2 of CLP Guidance), while relevant information concerning the inhalation route could not be identified.

Dossier Submitter's Response

FR (12/2014): There was no resource allocated to develop this endpoint. Nevertheless, German MS proposal for deletion of the footnote could be discussed at the RAC level.

RAC's response

Thank you for the comments. Only the endpoints proposed by the Dossier Submitter are handled in the RAC's opinion.

OTHER HAZARDS AND ENDPOINTS – Hazardous to the aquatic environment

Date	Country	Organisation	Type of Organisation	Comment number
06.11.2014	Belgium		MemberState	7

Comment received

Based on the results of the aquatic toxicity test on the most sensitive species (invertebrates: Chironomus dilutus with 96hEC50=0.0000325 mg/l (im) mg/l, Mysidopsis bahia with 28dNOEC=0.0000077 mg/l (im)), 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 1, H410. Furthermore, the substance shows no potential to bioaccumulate.

In view of the proposed classification and toxicity band for acute toxicity between 0.00001mg/l and 0.0001 mg/l, an M-factor for acute toxicity of 10 000 could be assigned and an M-factor for chronic toxicity of 10 000 (not rapidly degradable substance and NOEC between 0.000001mg/l and 0.00001mg/l)

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

Some editorial or/and minor comments:
We thank ANSES for the proposal of harmonised M-factors.
However we find it a missed opportunity that the acute toxicity wasn't tackled as well in this CLH report.

Dossier Submitter's Response

FR (12/2014): Thank you for your support.

RAC's response

Thank you for the comments. See the RAC opinion for the environmental classification. Only the endpoints proposed by the Dossier Submitter are handled in the RAC's opinion.

ANNEX 2 - COMMENTS AND RESPONSE TO COMMENTS ON CLH PROPOSAL ON FIPRONIL (ISO)

Date	Country	Organisation	Type of Organisation	Comment number
10.11.2014	Finland		MemberState	8

Comment received

We have some comments and questions concerning the publication Weston & Lydy (2014) on which the acute environmental classification proposal is based on, and these need to be clarified in order to decide whether this publication is useful for assessment of the classification for fipronil.

1. The current acute classification proposal is based on EC50 value of 0.0325 µg/l obtained for Chironomus dilutus. This value is based on endpoint ability to trash when prodded. As it is not clear how to interpret this mechanism in relation to classification, we propose to rely on the inability to swim endpoint obtained for Fallceon quilleri (EC50 0.071 µg/l). This would not change the classification proposal.

2. In the OECD test guideline (235, Chironomus sp., Acute Immobilisation Test) it is said that the larvae should be derived from a healthy stock (i.e. showing no signs of stress such as high mortality, discoloured animals, etc.) with a known history. In addition, all organisms used for an individual test should have originated from the same culture. The cultures should be maintained in conditions (light, temperature, and medium) similar to those to be used in the test. If the Chironomus sp. culture medium to be used in the test is different from that used for routine Chironomus sp. culture, it is good practice to include a pre-test acclimation period by placing egg masses for hatching and maintaining the first instar larvae in test dilution water at test temperature until the start of the exposure.
The test species Fallceon quilleri was obtained from northern Californian waterbodies and held in the leaf litter bags in creeks for appr. two weeks before 24 h acclimation period for the laboratory water. This procedure seems to differ from the OECD guidance and have you considered how this might have affected the test result?

In addition, it is mentioned that for some species (including Fallceon quilleri) test was limited to 48 h instead of 96 h because they produced unacceptable mortality in the preliminary tests. There is no speculation why unacceptable mortality existed in the CLH report. Has it been taken into account when considering the reliability of the test?

The test results are based on the initial measured concentrations even though measured concentrations ranged 66-131 % from the nominal. As recommended in the OECD Guidance Document on Aquatic Toxicity Testing of Difficult Substances and Mixtures (OECD, 2000), for semi-static test, where test concentrations do not remain 80-120 % of nominal, the effect concentrations could be determined and expressed relative to the geometric mean of the measured concentrations.

Dossier Submitter's Response

1. FR (12/2014): We asked more details to the authors about the choice of the sublethal endpoint and the limit criteria. He answered that "*The thrashing endpoint was used in the Pape-Lindstrom and Lydy article referenced in the fipronil paper, and a couple other papers with Lydy as an author that all came out within a few years of that one. These publications called it a figure-8 movement, because the animal, when it thrashes, creates an S shape in one direction, then a backward S in the other direction, which when they do it fast and the two directions are visually superimposed, it gives the impression of a figure 8… The ones that are affected by fipronil (and pyrethroids for that matter, and I'd assume most any neurotoxin) don't thrash with the same intensity. At most, when you prod them they might make an S shape once (versus normally numerous times in rapid succession) and it is very sluggish, taking maybe 5 seconds versus the milliseconds of normal thrashing. Most of them can't even do a single S shape. Occasionally it is a judgement call, but usually quite clear*." Therefore, we consider that the inability to trash when prodded could be similar to the inability to swim.

2. FR (12/2014): Our analysis on the study of Weston and Lydy (2014) was focussed on *Chironomus* species and not on *Fallceon quilleri*. Therefore, we did not ask more details to the author about the acclimation period of *Fallceon* and the unacceptable mortality after 48h.

ANNEX 2 - COMMENTS AND RESPONSE TO COMMENTS ON CLH PROPOSAL ON FIPRONIL (ISO)

RAC's response
Thank you for the comments. Please see the RAC opinion.

Date	Country	Organisation	Type of Organisation	Comment number
10.11.2014	United Kingdom		MemberState	9

Comment received

Aquatic toxicity (Section 5.4):

The majority of the aquatic ecotoxicity endpoints in the CLH Report concur with those agreed during assessment of the pesticidal and biocidal uses of fipronil. However, a key new public domain study by Weston and Lydy (2014) has been introduced which includes acute EC50 values for aquatic invertebrates significantly below those previously considered - resulting in an acute M-factor of 10000 for fipronil. We acknowledge that the authors of the CLH Report do provide justifications for including this study, despite it not being conducted to GLP nor to the usual standard guidelines or timescales. We feel however that the MSCA and RAC should carefully consider the reliability and relevance of this published study before concluding on the acceptance of these endpoints. If they are considered appropriate for hazard classification, then this conclusion should be fed back to the relevant pesticide and biocide regulatory authorities to consider whether fipronil requires more urgent review under respective sectoral legislation.

Dossier Submitter's Response

FR (12/2014): Thank you for your comment. After RAC discussions, if this new Weston and Lydy (2014) study is considered as relevant for classification, it could be included during the revision of the active substance under biocide regulation without any consequence for the initial risk assessment and also review under pesticide regulation.

RAC's response

Thank you for the comment.

ATTACHMENT RECEIVED:

1. *Conclusion regarding the peer review of the pesticide risk assessment of the active substance fipronil. Finalised: 3 March 2006.* Submitted by Austria on 10.11.2014 (Filename: Fipronil_EFSA_conclusion_final_rev1.doc). *[Please refer to comment 3]*