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REPORT OF PRAPeR EXPERT MEETING 61

PYRIPROXYFEN

Rapporteur Member State: NL

Specific comments on the active substance in the section

1. Physical and Chemical Properties

are already listed in the relevant reporting table. Comments submitted for this meeting are listed below.

1. Comments submitted for this meeting:

Date	Supplier	File Name
none		

2. Documents submitted for meeting:

Date	Supplier	File Name
December 2008	NL	Pyriproxyfen addendum Vol4 (December 2008) cover page.doc
December 2008	NL	Pyriproxyfen DAR B1-B5 rev (December 2008).doc
2008-12-17	NL	Pyriproxyfen evaluation table rev 0-0 (2008-12-17) phys-chem.doc
December 2008	NL	Pyriproxyfen list of end points (December 2008) phys-chem.doc
December 2008	NL	pyriproxyfen list of protected studies (December 2008) phys-chem.doc
2008-01-04	NL	Pyriproxyfen reporting table rev1-2 (2008-01-04).doc

3. Documents tabled at the meeting:

Date	Supplier	File Name
none		

The conclusions of the meeting were as follows:

- Data on preparations:** Pyriproxyfen 10EC
- Classification and labelling:** R65
- Recommended restrictions/conditions for use:** None.
- Reference list:** Not discussed

Areas of concern: None

Appendix 1: Discussion table: PYRIPROXYFEN

Appendix 2: Evaluation table

Appendix 1: Discussion Table, Pyriproxyfen (In)

1. Physical and Chemical Properties

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>Open point: 1.1 The agreed template for the list of endpoints should be used.</p> <p>See reporting table 1(1)</p>	<p>The RMS confirmed that the endpoints have been updated. However, some points still need to be brought in line with the agreed template. See below for list of amendments to the LOEPs.</p>	<p>Open point open.</p>
	<p>Data gap: 1.1</p> <p>Confirmatory method for the identity of impurity 2 has been identified as a data gap.</p> <p>The applicant has stated that this was submitted to the RMS in January 2006</p> <p>See reporting table 1(2)</p>	<p>The meeting agreed that the information did not constitute as a new study and it was considered to be acceptable.</p>	<p>Data gap turned into a point of clarification.</p> <p>Point of clarification addressed.</p>
1.1	<p>Point of clarification for the applicant</p> <p>The commercial availability of the starting materials should be provided.</p> <p>Especially for [REDACTED] if</p>	<p>The RMS confirmed the starting materials are commercially available.</p>	<p>Point of clarification addressed.</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>this is not commercially available a specification and method of manufacture should be provided.</p> <p>See reporting table 1(3)</p>		
1.2	<p>Point of clarification for the applicant:</p> <p>██████████ ██████████ ██████████ ██████████ ██████████ and therefore if they are not relevant impurities they should be removed from the specification.</p> <p>See reporting table 1(5)</p>	<p>The RMS highlighted that information is presented in the Addendum to Vol.4 and suggested that ██████████ (and therefore they should not be in the specification). The meeting considered that the levels proposed by the applicant ██████████ were not justified by the 5 batch analysis and that the applicant should provide QC data.</p>	<p>Point of clarification closed.</p> <p>New data gap proposed, see below.</p>
	<p>New data gap: 1.6 Identified at PRAPeR 61 meeting.</p> <p>The applicant should provide QC data to support the specification unless the non-relevant impurities in question are removed from the specification.</p>		<p>Data gap open.</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>Data gap: 1.2 The biological activity of the isomers has not been tested and this has been identified as a data gap.</p> <p>The applicant has stated that they will provide the data in December 2007.</p> <p>See reporting table 1(6)</p>	<p>The RMS highlighted that information is presented in the Addendum to Vol.4. However because the data was provided after the deadline in the Regulation (EC) No 1095/2007 the new data could not be considered.</p>	<p>Data gap open.</p>
	<p>Data gap: 1.3 GLP studies for relative density, spectra (IR, 1H-NMR and Mass), water solubility at pHs 5, 7 and 9, and partition coefficient at pHs 5, 7 and 9 have been identified as a data gap.</p> <p>The applicant has stated that these were submitted in January 2006.</p> <p>See reporting table 1(12)</p>	<p>The RMS highlighted that GLP studies for relative density, spectra (IR, 1H-NMR and Mass), water solubility and partition coefficient have been submitted. However because the data were provided after the deadline in the Regulation (EC) No 1095/2007 and 1490/2002 the new data could not be considered.</p>	<p>Data gap open.</p>
	<p>Open point: 1.2</p>	<p>The RMS clarified at the meeting that the vapour pressure is $<1.33 \times 10^{-5}$ Pa.</p>	<p>Open Point closed.</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>Rapporteur should clarify what the correct vapour pressure is.</p> <p>See reporting table 1(16)</p>		
	<p>Data gap: 1.4 A new calculation of Henry's Law constant should be made using the new water solubility study has been identified as a data gap</p> <p>The applicant has stated that this will be available in December 2006.</p> <p>See reporting table 1(17)</p>	<p>Given that water solubility is still a data gap this point remains a data gap.</p>	<p>Data gap open.</p>
	<p>Open point: 1.3 The following four new studies submitted to the RMS in January 2006</p> <ul style="list-style-type: none"> - Report No. NNP-0102 (Relative Density) - Report No. NNP-0104 (Spectroscopic Properties (IR, NMR, MS)) 	<p>See Above.</p>	<p>Open point closed</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>- Report No. NNP-0105 (Water Solubility) - Report No. NNP-0103 (n-Octanol/Water Partition Coefficient) can not be considered in accordance with Regulation 1095/2007</p> <p>See reporting table 1(29)</p>		
	<p>Open point 1.4 Under B.2.2 In the methods and results column it appears that a lot of the text in the original template used to make this document has been left in by mistake. This makes the table unclear and it should be amended.</p> <p>See reporting table 1(30)</p>	<p>RMS confirmed that the table has been amended.</p>	<p>Open point closed.</p>
1.3	<p>Point of clarification for the applicant: The oxidising properties of the formulation needs to be addressed.</p> <p>See reporting table</p>	<p>The RMS explained that no new study or reasoned statement was provided. The meeting agreed that the information provided by the applicant was not sufficient.</p>	<p>Point of clarification turned into data gap, see below.</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	1(31)		
	<p>New data gap: 1.7 Identified at PRAPeR 61 meeting.</p> <p>The applicant to provide information on the oxidising properties of the formulation.</p>		Data gap open.
	<p>Open point: 1.5 The packaging material B.3, further information on the ppp states PE/EVOH but in column 3 the rapporteur states PE/PB. What is PE/PB.</p> <p>See reporting table 1(33)</p>	The RMS explained that no new study or reasoned statement was provided. The meeting agreed that the information provided by the applicant was not sufficient.	<p>Open Point closed.</p> <p>New data gap proposed, see below.</p>
	<p>New data gap: 1.8 Identified at PRAPeR 61 meeting.</p> <p>The applicant to provide information on the packaging material. Depending on what information is provided further storage stability data may be required to address the interaction</p>		Data gap open.

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	of the formulation with the commercial packaging.		
	<p>Open point: 1.6 The need for R65 classification should be discussed by a meeting of experts.</p> <p>See reporting table 1(36)</p>	<p>Using a stepwise approach the meeting considered the triggers and concluded that R65 is appropriate.</p>	<p>Open point closed.</p>
	<p>Data gap: 1.5 The need for a method of analysis for plants including ILV and a confirmatory method if necessary. has been identified.</p> <p>See reporting table 1(40)</p>	<p>The RMS clarified that 3 mass fragments were used for all relevant matrices. However, one mass fragment was less than 100. The meeting on this occasion considered this to be acceptable.</p>	<p>Data gap closed.</p>
	<p>Open point: 1.7 The validation data for the confirmatory soil and water methods should be provided in an addendum. It is noted that the data were available when the DAR was written.</p> <p>See reporting table 1(42)</p>	<p>The RMS indicated that in their opinion no (full) validation for confirmatory methods are required. Additional information is provided in Table B.5.3.1 and the meeting accepted that this was sufficient.</p>	<p>Open point closed.</p>
	New open point: 1.8	LOEP amendments	Open point open.

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>Identified at PRAPeR 61 meeting.</p> <p>RMS to amend the list of end points according to the discussions during the PRAPeR 61 meeting.</p>	<p>Delete the boxes for Relative density, Hydrolytic stability, Photostability and Quantum yield. The order should be changed to agreed template. The correct table for the representative uses should be provided. In the 'Min purity' box the ratio of the enantiomers (i.e add 'racemic') In the box for molecular mass the unit 'u'. Vapour pressure should be amended. Henry's Law constant should be 'open'. Solubility in water should read 'open'. Partition coefficient should read 'open'. UV spectrum box is missing and should be included. Delete Food feed delete 'ILV and confirmatory method required for cotton seed'. Delete 'BBA' in the soil method box.</p>	

Appendix 2: Evaluation table

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	<u>Column B</u> Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the Evaluation Meeting
	Section 1 Open points: 7 Points for clarification: 3 Data gaps: 5			Section 1 Open points: 2 Points for clarification: 0 Data gaps: 6
	Open point: 1.1 The agreed template for the list of endpoints should be used. See reporting table 1(1)		December 2008: The LoEP has been amended to the agreed template.	<u>PRAPeR 61 (13 – 16 January 2009)</u> Open point open.
	Data gap: 1.1 Confirmatory method for the identity of impurity 2 has been identified as a data gap. The applicant has stated that this was submitted to the RMS in January 2006 See reporting table 1(2)	Notifier: A new study (NNA-0097) was submitted to the RMS in January 2006 to confirm the identity of Impurity #2 in pyriproxyfen technical material responding to the question raised on the draft DAR from RMS. The RMS has acknowledged the receipt of this study.	December 2008: See addendum to Vol. 4 (December 2008).	<u>PRAPeR 61 (13 – 16 January 2009)</u> Data gap turned into a point of clarification. Point of clarification addressed.

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	<u>Column B</u> Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the Evaluation Meeting
1.1	<p>Point of clarification for the applicant</p> <p>The commercial availability of the starting materials should be provided. Especially for [REDACTED] if this is not commercially available a specification and method of manufacture should be provided.</p> <p>See reporting table 1(3)</p>	<p>Notifier: Information on the commercial availability of the starting materials, especially for [REDACTED] was provided from different manufacturer (Japanese and Chinese) and was submitted to the EFSA by the agreed deadline of 01 December 2007</p>	<p>December 2008: MSDS of [REDACTED] is provided. Point clarified.</p>	<p><u>PRAPeR 61 (13 – 16 January 2009)</u></p> <p>Point of clarification addressed.</p>
1.2	<p>Point of clarification for the applicant:</p> <p>[REDACTED] [REDACTED] [REDACTED] and therefore if they are not relevant impurities they should be removed from the specification.</p> <p>See reporting table 1(5)</p>	<p>Notifier: Although agreeing that the technical specification should be based on the current 5-batch analysis, the notifier would prefer to [REDACTED] in the specification. The reasons for this request is that the level of these impurities in technical material depends on the composition of the starting materials. The level of [REDACTED] in starting materials are fluctuating, therefore, the notifier wishes to retain [REDACTED] for these two impurities in the specification.</p> <p>This information was submitted to the EFSA by the agreed deadline of 01 December 2007</p>	<p>December 2008: See addendum to Vol.4 (December 2008). The level on the specification for both impurities should be kept at [REDACTED]</p>	<p><u>PRAPeR 61 (13 – 16 January 2009)</u></p> <p>Point of clarification closed.</p> <p>New data gap proposed, see below.</p>

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the Evaluation Meeting
	<p>New data gap: 1.6 Identified at PRAPeR 61 meeting.</p> <p>The applicant should provide QC data to support the specification unless the non-relevant impurities in question are removed from the specification.</p>			<p><u>PRAPeR 61 (13 – 16 January 2009)</u></p> <p>Data gap open.</p>
	<p>Data gap: 1.2 The biological activity of the isomers has not been tested and this has been identified as a data gap.</p> <p>The applicant has stated that they will provide the data in December 2007.</p> <p>See reporting table 1(6)</p>	<p>Notifier: Information can be found in the publication from Kramer et al, Modern Crop Protection Compounds, 25 Insect molting and metamorphosis, WILEY-VCH Verlag GmbH & Co. KgaA (p797 – 811). Based on the results, the activity ratio of the (R)- and (S)-forms of pyriproxyfen was about 1 : 9 (R:S)</p> <p>This information was submitted to the EFSA by the agreed deadline of 01 December 2007.</p>	<p>December 2008: See addendum to Vol.4 (December 2008).</p>	<p><u>PRAPeR 61 (13 – 16 January 2009)</u></p> <p>Data gap open.</p>

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	<u>Column B</u> Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the Evaluation Meeting
	<p>Data gap: 1.3 GLP studies for relative density, spectra (IR, 1H-NMR and Mass), water solubility at pHs 5, 7 and 9, and partition coefficient at pHs 5, 7 and 9 have been identified as a data gap.</p> <p>The applicant has stated that these were submitted in January 2006.</p> <p>See reporting table 1(12)</p>	<p>Notifier: New GLP studies for relative density, spectra (IR, 1H-NMR and Mass), water solubility at pHs 5, 7 and 9, and partition coefficient at pHs 5, 7 and 9 were submitted to the RMS in January 2006. The RMS has acknowledged the receipt of these studies.</p>	<p>December 2008: GLP studies for IR, ¹H NMR and MS spectra, water solubility and partition coefficient have been submitted. B2 (revised Vol3, December 2008) and LoEP have been amended accordingly.</p>	<p><u>PRAPeR 61 (13 – 16 January 2009)</u></p> <p>Data gap open.</p>
	<p>Open point: 1.2 Rapporteur should clarify what the correct vapour pressure is.</p> <p>See reporting table 1(16)</p>	<p>Notifier: The RMS could mistakenly have revised the vapour pressure of $<1.33 \times 10^{-5}$ Pa as shown in Open point 1(16) of the reporting table and described it in the endpoint lists. The report states a vapour pressure of $< 1.0 \times 10^{-7}$ mmHg at 22.81°C, hence the correct value should be $<1.33 \times 10^{-5}$ Pa as indicated in the DAR.</p> <p>Based on point 1(17) of the reporting table, the notifier submitted a new report for Henry's law constant in which the correct vapour pressure ($<1.33 \times 10^{-5}$ Pa) is used for the calculation.</p>	<p>December 2008: The report states the vapour pressure being $<1.0 \times 10^{-7}$ Pa. B2 (revised Vol3, December 2008) and LoEP are amended accordingly.</p>	<p><u>PRAPeR 61 (13 – 16 January 2009)</u></p> <p>Open point closed.</p>

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	<u>Column B</u> Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the Evaluation Meeting
	<p>Data gap: 1.4 A new calculation of Henry's Law constant should be made using the new water solubility study has been identified as a data gap</p> <p>The applicant has stated that this will be available in December 2006.</p> <p>See reporting table 1(17)</p>	<p>Notifier: The RMS has acknowledged the receipt of the new study for water solubility and a new calculation of Henry's Law constant has been provided.</p> <p>This recalculation of the Henry's Law constant for pyriproxyfen was presented by the notifier in a new study report (NNP-0113). Calculated value $< 7.37 \times 10^{-2}$ Pa m³ mol⁻¹</p> <p>This information was submitted to the EFSA by the agreed deadline of 01 December 2007.</p>	<p>December 2008: Henry Law's constant has been recalculated with the correct vapour pressure being $< 1.0 \times 10^{-7}$ Pa and results from the new water solubility study. The calculated value $< 7.37 \times 10^{-4}$ has been amended in the LoEP and B2 (revised Vol3, December 2008).</p>	<p><u>PRAPeR 61 (13 – 16 January 2009)</u></p> <p>Data gap open.</p>

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	<u>Column B</u> Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the Evaluation Meeting
	<p>Open point: 1.3</p> <p>The following four new studies submitted to the RMS in January 2006</p> <ul style="list-style-type: none"> - Report No. NNP-0102 (Relative Density) - Report No. NNP-0104 (Spectroscopic Properties (IR, NMR, MS)) - Report No. NNP-0105 (Water Solubility) - Report No. NNP-0103 (n-Octanol/Water Partition Coefficient) can not be considered in accordance with Regulation 1095/2007 <p>See reporting table 1(29)</p>		<p>December 2008:</p> <p>RMS disagrees that these studies can not be taken into account as they were submitted before December 1st 2007. Revised Vol 3 (December 2008) and LoEP have been amended.</p>	<p><u>PRAPeR 61 (13 – 16 January 2009)</u></p> <p>Open point closed.</p>
	<p>Open point 1.4</p> <p>Under B.2.2 In the methods and results column it appears that a lot of the text in the original template used to make this document has been left in by mistake. This makes the table unclear and it should be amended.</p> <p>See reporting table 1(30)</p>		<p>December 2008:</p> <p>The table under B2.2. is amended in the revised volume 3 (December 2008).</p>	<p><u>PRAPeR 61 (13 – 16 January 2009)</u></p> <p>Open point closed.</p>

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	<u>Column B</u> Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the Evaluation Meeting
1.3	<p>Point of clarification for the applicant: The oxidising properties of the formulation needs to be addressed.</p> <p>See reporting table 1(31)</p>	<p>Notifier: The available study following US EPA study guidelines is fully valid to support the EU requirement for oxidising properties of a liquid product like Pyriproxyfen 10 EC</p>	<p>December 2008: No new studies or reasoned statement is submitted as was requested. Therefore still point of clarification for the applicant.</p>	<p><u>PRAPeR 61 (13 – 16 January 2009)</u></p> <p>Point of clarification turned into data gap, see below.</p>
	<p>New data gap: 1.7 Identified at PRAPeR 61 meeting.</p> <p>The applicant to provide information on the oxidising properties of the formulation.</p>			<p><u>PRAPeR 61 (13 – 16 January 2009)</u></p> <p>Data gap open.</p>
	<p>Open point: 1.5 The packaging material B.3, further information on the ppp states PE/EVOH but in column 3 the rapporteur states PE/PB. What is PE/PB.</p> <p>See reporting table 1(33)</p>	<p>Notifier: This issue will be addressed at Member State National re-registrations</p>	<p>December 2008: In the reporting table it is stated that notifier should provide information on the container material, RMS agreed on that. This should not be considered as an open point. PB generally stands for polybutadiene. However no new studies or reasoned statement as requested is submitted. To be addressed at Member State level.</p>	<p><u>PRAPeR 61 (13 – 16 January 2009)</u></p> <p>Open Point closed.</p> <p>New data gap proposed, see below.</p>

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the Evaluation Meeting
	<p>New data gap: 1.8 Identified at PRAPeR 61 meeting.</p> <p>The applicant to provide information on the packaging material. Depending on what information is provided further storage stability data may be required to address the interaction of the formulation with the commercial packaging.</p>			<p><u>PRAPeR 61 (13 – 16 January 2009)</u></p> <p>Data gap open.</p>
	<p>Open point: 1.6 The need for R65 classification should be discussed by a meeting of experts.</p> <p>See reporting table 1(36)</p>	<p>Notifier: Agree with the UK and the RMS that R65 is not required based on the trigger for surface tension not being reached.</p>	<p>December 2008: To be discussed by a meeting of experts.</p>	<p><u>PRAPeR 61 (13 – 16 January 2009)</u></p> <p>Open point closed.</p>
	<p>Data gap: 1.5 The need for a method of analysis for plants including ILV and a confirmatory method if necessary. has been identified.</p> <p>See reporting table 1(40)</p>	<p>Notifier: Request clarification as to which plant matrices and what additional validation is necessary? In the reporting table the RMS considers the plant method for high water containing matrices to be adequate. Reasoned arguments are presented in the ILV report (Study 2) as to why a verification ion <m/z 100 was selected. The lower mass number of 78 originates from the phenyl group being detached via</p>	<p>December 2008: The method provided for high water content is considered adequately validated.</p> <p>ILV of the method for high fat content shows indeed successful validation on olives.</p> <p>Confirmatory methods however should be submitted.</p>	<p><u>PRAPeR 61 (13 – 16 January 2009)</u></p> <p>Data gap closed.</p>

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	<u>Column B</u> Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the Evaluation Meeting
		<p>ether cleavage from pyriproxyfen and should be one of the confirmation mass numbers. Notifier agrees with the RMS that no further validation is necessary for water containing commodities.</p> <p>For commodities with high fat content the original method validation (Study 3) was successfully performed on cotton seed. ILV of this method (Study 4) shows successful validation on olives. Therefore in terms of primary methodology a suitable validation of a method for commodities with high fat content has been adequately demonstrated. Therefore sufficient information is also considered to have been submitted for analysis of crops with high fat content.</p> <p>According to Official Journal of the European Union, L 19/23, 24.1.2006, a monitoring programme for pyriproxyfen in several crops is underway. Crops are apples (acid commodity), head cabbage, leek, lettuce, tomatoes, peaches including nectarines and similar hybrids (watery commodities), rye or oats (dry commodities), and strawberries (watery). Therefore, a suitable monitoring method must be available</p>	<p>Notifier should provide adequate methods, irrespective the availability of methods elsewhere used in the world.</p>	

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	<u>Column B</u> Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the Evaluation Meeting
		<p>in EU. Also, a new MRM using LC/MS/MS has been developed in Germany and pyriproxyfen is listed as being recoverable.</p> <p>Since official MRMs are available for pyriproxyfen in several crops in EU, it seems that any further validation is not required. Confirmation is therefore requested as to whether further validation is necessary.</p>		
	<p>Open point: 1.7 The validation data for the confirmatory soil and water methods should be provided in an addendum. It is noted that the data were available when the DAR was written.</p> <p>See reporting table 1(42)</p>		<p>December 2008: According to SANCO 825/00 and SANCO 3029/99 no (full) validation for confirmatory methods is required. These methods are to demonstrate specificity, this has been demonstrated at LOQ and 10x LOQ. At LOQ recoveries have been calculated for 3 fortifications. They were virtually the same as those reported for the GC-NPD method.</p> <p>Vol.3 has been amended.</p>	<p><u>PRAPeR 61 (13 – 16 January 2009)</u> Open point closed.</p>
	<p>New open point: 1.8 Identified at PRAPeR 61 meeting.</p> <p>RMS to amend the list of end points according to the discussions during the PRAPeR 61 meeting.</p>			<p><u>PRAPeR 61 (13 – 16 January 2009)</u> Open point open.</p>

REPORT OF PRAPeR EXPERT MEETING 62

PYRIPROXYFEN

Rapporteur Member State: NL

Specific comments on the active substance in the section

4. Fate and behaviour in the environment

are already listed in the relevant reporting table. Comments submitted for this meeting are listed below.

1. Comments submitted for this meeting:

Date	Supplier	File Name
none		

2. Documents submitted for meeting:

Date	Supplier	File Name
December 2008	NL	Pyriproxifen addendum B8 (December 2008).doc
December 2008	NL	Pyriproxyfen addendum Vol 4 (December 2008) cover page.doc
December 2008	NL	Pyriproxyfen evaluation table rev 0-1 (December 2008) fate.doc
December 2008	NL	Pyriproxyfen list of end points (December 2008) fate.doc
December 2008	NL	Pyriproxyfen list of protected studies (December 2008) fate.doc
2008-01-04	NL	Pyriproxyfen reporting table rev1-2 (2008-01-04).doc

3. Documents tabled at the meeting:

Date	Supplier	File Name
None		

The conclusions of the meeting were as follows:

4. **Data on preparations:** Pyriproxyfen 10 EC
5. **Classification and labelling:** Candidate for R53
6. **Recommended restrictions/conditions for use:** Only one crop per year has been assessed for the protected uses.
7. **Reference list:** some open points remain.

Areas of concern: None identified
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Appendix 1: Discussion table: PYRIPROXYFEN

Appendix 2: Evaluation table

Appendix 1: Discussion Table, Pyriproxyfen (In)

4. Fate and behaviour

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>Open point 4.1 RMS to annotate the LoEP rate of degradation in soil, laboratory studies, DT50 for 4-OH-Pyr to indicate that these values 'are dissipation rates (represent the sum of formation and degradation rate constants) estimated from the time point of the maximum observed concentration, in studies where pyriproxyfen was dosed.'</p> <p>See reporting table 4(6)</p>	<p>The List of endpoints dated December 2008 provided for the meeting had not been updated as requested.</p> <p>EFSA noted that this form of words has been used and agreed by experts as appropriate for use in this situation, in the endpoints of EFSA conclusions for other substances. It was agreed by the experts that it would be clearer if the word 'dissipation' was replaced with 'decline'.</p>	<p>Open point open. RMS to annotate the LoEP rate of degradation in soil, laboratory studies, DT50 for 4-OH-Pyr to indicate that these values 'are decline rates (represent the result of the sum of formation and degradation rate constants) estimated from the time point of the maximum observed concentration, in studies where pyriproxyfen was dosed.'</p>
4.1	<p>Point of clarification for the applicant. Applicant to provide pKa estimates (QSAR calculations) for the</p>	<p>The requested information was evaluated by the RMS in the Addendum to Volume 3 (B8) dated December 2008 (revised).</p> <p>The RMS proposed that based on the available QSAR calculations it could be assumed that the ionisation state of the metabolites 4'-OH-Pyr and PYPAC will not be significantly</p>	<p>Point of clarification addressed.</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>metabolites PYPAC and 4-OH-Pyr together with their argumentation how adsorption of pyriproxyfen PYPAC and 4-OH-Pyr would or would not be significantly affected at the pH range normally associated with agricultural soils.</p> <p>The applicant indicated that the requested clarification will be available by 01 December 2007.</p> <p>See reporting table 4(7)</p>	<p>affected at the range of pH of typical agricultural soils (pH 5-7.5).</p> <p>The experts agreed that PYPAC and 4-OH-Pyr are not expected to exhibit pH dependent adsorption / desorption in the pH range of agricultural soils.</p>	
	<p>Open point 4.2 RMS to present clear accumulated soil PEC for metabolite 4-OH Pyr and the use on tomato / egg plant with the assumptions regarding the number of crops assumed to be planted per year clarified in an addendum. LoEP to be updated as</p>	<p>The RMS was of the opinion that an accumulated soil PEC was not required for the metabolite 4'-OH-Pyr as the soil DT90 (estimated as decline from maximum observed in the available studies dosed with parent) was less than 1 year (234 days). The open point originated from a comment from EFSA which also had this opinion. EFSA was puzzled why and on what basis the accumulation PEC soil on pages 338-339 of volume 3 of the DAR had been calculated. Originally in the reporting table the RMS had indicated that they agreed that the calculations were superfluous when only 1 crop per year was grown but indicated that possibly in Southern European glasshouses 2 crops of egg plants or tomatoes grown in soil might be possible. The RMS proposed (in the reporting table) to recalculate accumulated soil PEC assuming 2 crops could be grown per year.</p> <p>The calculations were not available to the meeting as they had not been provided. However the RMS indicated that as a second crop was unlikely to be planted within 100</p>	<p>Open point open. RMS to delete the accumulated soil PEC for tomato for '4'-OH-Pyr from the LoEP (soil accumulation and plateau concentration box) and replace with 'not required'.</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>appropriate with these clarified accumulated 4-OH Pyr soil PEC.</p> <p>See reporting table 4(9)</p>	<p>days of the last application to the previous crop and at 100 days the soil PEC for 4'-OH-Pyr was essentially zero (TWA calculated to be 0.002 mg/kg). It was noted that the PEC was calculated to be essentially zero by 28 days. Though the PHI is short at 3 days it was agreed that a second crop planted subsequent to a previous crop treated with this short PHI was unlikely to be treated within 28 days when good agricultural practice (good hygiene) practice was followed.</p> <p>The experts from the member states agreed that no PEC accumulation was needed for this metabolite.</p>	
	<p>Open point 4.3 In the LoEP, RMS to delete '4'-OH-Pyr: maximum plateau concentration of 0.002 (SE) mg/kg reached after 1 year application on cotton of 1 x 75 g/ha (SE).' from the soil accumulation and plateau concentration box.</p> <p>See reporting table 4(9)</p>	<p>This action has not been completed. No discussion was required as only 1 cotton crop will be grown per year and the soil DT90 is only 234 days (less than a year). Consequently a meaningful accumulated soil concentration from the requested use on cotton cannot be calculated, so should not be any value for cotton in the LoEP soil accumulation and plateau concentration box.</p> <p>Open point remains</p>	<p>Open point open. In the LoEP, RMS to delete '4'-OH-Pyr: maximum plateau concentration of 0.002 (SE) mg/kg reached after 1 year application on cotton of 1 x 75 g/ha (SE).' from the soil accumulation and plateau concentration box.</p>
4.2	<p>Point of clarification for the applicant. Applicant to provide an assessment of the potential for groundwater exposure from pyriproxyfen or its metabolites 4-OH-Pyr and PYPAC as a result of the applied for uses</p>	<p>The requested information was evaluated by the RMS in the Addendum to Volume 3 (B8) dated December 2008 (revised).</p> <p>The RMS agreed with the conservative calculations provided. The approach is conservative as the GAP for protected crops (rate and timing) was assumed, whilst the standard scenario definition for outdoor tomatoes defined by FOCUS was assumed (outdoor use is not the applied for intended use). Simulations representing outdoor conditions will result in more groundwater recharge of both solute and water than would be expected from indoor use when good irrigation practice is followed at the very least for the</p>	<p>Point of clarification addressed.</p> <p>New open point proposed, see below.</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>in glasshouses.</p> <p>The applicant indicated that the requested clarification will be available by 01 December 2007.</p> <p>See reporting table 4(19)</p>	<p>Piacenza scenario (outdoor).</p> <p>Overall, RMS had minor reservations since the climatic meteorological data in all scenarios do not represent the situation inside glasshouses. In the opinion of the RMS the Piacenza scenario is the most representative one.</p> <p>It is noted that the GW assessment is based on the use of the product in only one crop per year. EFSA will indicate this in the conclusion (particular conditions of use)</p> <p>The experts agreed that ground water assessment of the greenhouse use is covered by the modelling presented and that the results need to be included in the LoEP.</p>	
	<p>New open point: 4.8 Identified at PRAPeR 62 meeting.</p> <p>RMS to include GW assessment for greenhouse use in the LoEP.</p>		<p>Open point open.</p>
	<p>Open point 4.4</p> <p>RMS to update the LoEP (photochemical oxidative degradation in air and PEC air method of calculation boxes) with the correct Atkinson method calculated atmospheric DT50 which should be consistent with the Physchem section of the endpoints.</p> <p>See reporting table</p>	<p>The LoEP was updated as requested in the version dated December 2008.</p>	<p>Open point fulfilled.</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	4(31)		
	<p>Open point 4.5 RMS to add the reference Study Report No. NNP-0067, '4'-OH-Pyriproxyfen - Water solubility' to the separate list of information tests and studies relied on. (Report No. NNP-0068), the study title should be changed to 'PYPAC - Water solubility', in the separate list of information tests and studies relied on.</p> <p>See reporting table 4(34)</p>	<p>The title of the study report of report no. NNP-0068 was corrected as requested in the document the RMS called 'List of protected studies version 2-December 2008 Fate' (note the title of this document should be list of information tests and studies relied on).</p> <p>The Study Report No. NNP-0067, '4'-OH-Pyriproxyfen - Water solubility has now been summarised and evaluated by the RMS in the Addendum to Volume 3 (B8) dated December 2008 (revised). However this reference is not in the document 'List of protected studies version 2-December 2008 Fate'. It has been relied on (value used as input in FOCUS simulations) so should be included in the pertinent reference list.</p>	<p>Open point open. RMS to add the reference Study Report No. NNP-0067, '4'-OH-Pyriproxyfen - Water solubility' to the document 'List of protected studies version 2-December 2008 Fate' and rename this document as 'list of information tests and studies relied on fate'.</p>
	<p>Open point 4.6 RMS to delete the reference Fathulla 1995a (anaerobic aquatic metabolism) from the separate list of information tests and studies relied on.</p> <p>See reporting table 4(35)</p>	<p>The document the RMS called 'List of protected studies version 2-December 2008 Fate' was updated in the way requested (pertinent study deleted).</p>	<p>Open point closed.</p>
	Open point 4.7	RMS is of the opinion that the references should be retained since some of the input	Open point open.

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>RMS to update the separate list of information tests and studies relied on section for fate and behaviour by deleting the annex III references that were calculations that were not relied on.</p> <p>See reporting table 4(36)</p>	<p>parameters proposed by the applicant had been also used also by the RMS. Experts in the meeting have not a strong opinion. However, experts prefer the RMS reconsiders which studies have been relied on (in the sense that at least some of the reports results have been transferred to the LoEP) and update the list of information tests and studies relied on accordingly.</p>	<p>RMS to reconsider which studies have been relied on (in the sense that at least some of the reports results have been transferred to the LoEP) and update the list of information tests and studies relied on accordingly</p>
	<p>Message from PRAPeR 61 (Phys chem properties)</p> <p>The vapour pressure and the water solubility of pyriproxyfen has changed. Both values become lower.</p>	<p>Experts of the meeting took note of the message and noted that the change is not expected to have an impact in the fate and behaviour assessment.</p>	<p>Message noted</p>
	<p>New open point: 4.9 Identified at PRAPeR 62 meeting.</p>	<p>Residues that need to be further assessed. Soil: pyriproxyfen Surface water: pyriproxyfen, 4-OH-pyr, DPH-Pyr and PYPAC. Sediment: pyriproxyfen, 4-OH-pyr and PYPAC. Ground water: pyriproxyfen, 4-OH-pyr and PYPAC. Air: pyriproxyfen.</p>	<p>Open point open. RMS to remove the suggestion for the residue definition for monitoring from the fate section of the LoEP.</p>

Appendix 2: Evaluation table

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the evaluation group
	Section 4 Open points: 7 Points for clarification: 2 Data gaps: 0			Section 4 Open points: 8 Points for clarification: 0 Data gaps: 0
	Open point 4.1 RMS to annotate the LoEP rate of degradation in soil, laboratory studies, DT50 for 4-OH-Pyr to indicate that these values 'are dissipation rates (represent the sum of formation and degradation rate constants) estimated from the time point of the maximum observed concentration, in studies where pyriproxyfen was dosed.' See reporting table 4(6)		December 2008: We don't agree on the open point set. According to FK chapter 8.4.2. page 156 a conservative estimate for trigger values for the metabolite can be obtained by estimating the disappearance of the metabolite from its observed maximum. This is exactly the way that was chosen here. This approach can be used for calculating PECs and also for PECgw as it is a worst case estimate for the degradation of the metabolite. We don't agree on the wording that the value is a dissipation rate as it is still degradation that has been assessed. As the true maximum might have been higher compared to the observed maximum, the degradation rate in the decline phase may underestimate the true degradation rate. Therefore, the only wording suitable to add would be 'conservative estimate'.	<u>PRAPeR 62 (13 – 15 January 2009)</u> Open point open. RMS to annotate the LoEP rate of degradation in soil, laboratory studies, DT50 for 4-OH-Pyr to indicate that these values 'are decline rates (represent the result of the sum of formation and degradation rate constants) estimated from the time point of the maximum observed concentration, in studies where pyriproxyfen was dosed.'
4.1	Point of clarification for the applicant.	Notifier: It is not possible to draw any clear conclusions concerning the	December 2008: RMS agrees with notifier. Submitted	<u>PRAPeR 62 (13 – 15 January 2009)</u>

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the evaluation group
	<p>Applicant to provide pKa estimates (QSAR calculations) for the metabolites PYPAC and 4-OH-Pyr together with their argumentation how adsorption of pyriproxyfen PYPAC and 4-OH-Pyr would or would not be significantly affected at the pH range normally associated with agricultural soils.</p> <p>The applicant indicated that the requested clarification will be available by 01 December 2007.</p> <p>See reporting table 4(7)</p>	<p>influence of pH on the adsorption of metabolites 4'-OH-Pyr and PYPAC. No clear influence of pH was observed during the adsorption / desorption studies. Given their chemical properties, it is possible that adsorption of these metabolites may be pH dependent. However, based on the estimated pKa values for the metabolites, which are shown below, it can be assumed that the ionised form of these metabolites will not be significantly affected at the pH range normally associated with agricultural soils (pH 5.0 – 7.5).</p> <p>The dissociation constants (pKa) are estimated to be 2.06 and 4.35 for PYPAC, and 3.63 and 10.1 for 4'-OH-Pyr using the ACD/pK DB Program [Ver. 4.5, Advanced Chemistry Development (2000)]. This information was submitted to the EFSA by the agreed deadline of 01 December 2007, in Appendix 4.7.</p>	<p>information is included in the addendum (December 2008).</p>	<p>Point of clarification addressed.</p>
	<p>Open point 4.2 RMS to present clear accumulated soil PEC for metabolite 4-OH Pyr and the use on tomato / egg plant with the assumptions regarding the number of</p>		<p>December 2008: As the longest DT90 is < 365 days it is not required to calculate PEC_{acc}. The provided calculations are superfluous. For tomatoes and eggplants in glasshouses in NE only one crop per year is grown. For SE tomato and</p>	<p><u>PRAPeR 62 (13 – 15 January 2009)</u> Open point open. RMS to delete the accumulated soil PEC for tomato for '4'-OH-Pyr from the LoEP (soil accumulation and plateau concentration box) and replace with 'not</p>

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the evaluation group
	<p>crops assumed to be planted per year clarified in an addendum. LoEP to be updated as appropriate with these clarified accumulated 4-OH Pyr soil PEC.</p> <p>See reporting table 4(9)</p>		<p>eggplant only 1 crop per year is grown. Even if 2 crops per year are grown in Northern European glasshouses the carry over of soil residue is marginal. After 100 days the PECsoil TWA concentration is 0.005 mg/kg. For the metabolites 4'-OH-Pyr and PYPAC it is <0.001 mg/kg. The interval between 2 crops will always be larger than 100 days.</p>	<p>required'.</p>
	<p>Open point 4.3 In the LoEP, RMS to delete '4'-OH-Pyr: maximum plateau concentration of 0.002 (SE) mg/kg reached after 1 year application on cotton of 1 x 75 g/ha (SE).' from the soil accumulation and plateau concentration box.</p> <p>See reporting table 4(9)</p>		<p>December 2008: As the longest DT90 is <365 days it is not required to calculate PECacc. Values referring to a PECacc should be deleted from the LoEP. But as there is no calculation in the first place there is nothing to delete.</p>	<p><u>PRAPeR 62 (13 – 15 January 2009)</u></p> <p>Open point open. In the LoEP, RMS to delete '4'-OH-Pyr: maximum plateau concentration of 0.002 (SE) mg/kg reached after 1 year application on cotton of 1 x 75 g/ha (SE).' from the soil accumulation and plateau concentration box.</p>
4.2	<p>Point of clarification for the applicant. Applicant to provide an assessment of the potential for groundwater exposure from pyriproxyfen or its metabolites 4-OH-Pyr and PYPAC as a result of the applied for uses in glasshouses.</p>	<p>Notifier: A FOCUS groundwater modelling assessment for the glasshouse tomato and eggplant uses was actually conducted for pyriproxyfen and its metabolites 4'-OH-Pyr and PYPAC and this modelling was submitted to the RMS with the original dossier for pyriproxyfen in November 2003 (SCC Report Nos.: NNW-0162, NNW-0163 and NNW-0164). As</p>	<p>December 2008: The FOCUS groundwater modelling for tomato field crop as surrogate for glasshouse use is included in the addendum (December 2008). It is questionable how relevant the predicted concentrations are for the application of pyriproxyfen in glasshouses. Climate conditions are usually optimised for plant growth and an excess of irrigation water is</p>	<p><u>PRAPeR 62 (13 – 15 January 2009)</u></p> <p>Point of clarification addressed.</p> <p>New open point proposed, see below.</p>

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the evaluation group
	<p>The applicant indicated that the requested clarification will be available by 01 December 2007.</p> <p>See reporting table 4(19)</p>	<p>there are currently no FOCUS groundwater scenarios available that are relevant to protected crops, the simulations were based on the FOCUS scenarios for outdoor field tomatoes, which were selected as a worst-case surrogate. However, a revised FOCUS groundwater modelling assessment was subsequently conducted by the RMS using refined input parameters as reported in the DAR, and this assessment did not address the glasshouse uses. An evaluation of the available modelling which has been conducted in support of the field use on cotton and tomatoes demonstrates that predicted annual average concentrations of pyriproxyfen and its metabolites 4'-OH-Pyr and PYPAC were <0.001 µg/L in groundwater at 1m depth for all scenarios. These results clearly demonstrate that pyriproxyfen can be used safely within the EU without risk of concentrations of pyriproxyfen or its metabolites exceeding the 0.1 µg/L regulatory threshold in groundwater.</p> <p>As proposed in the reporting table 4(19), a worst-case groundwater modelling assessment for</p>	<p>prohibited, the leaching conditions are not comparable to standard field conditions.</p>	

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	<u>Column B</u> Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the evaluation group
		<p>pyriproxyfen and its metabolites 4'-OH-Pyr and PYPAC has been conducted to cover the glasshouse uses in Southern Europe. The simulations were based on application to field tomatoes at the maximum recommended application rate for glasshouse tomato and eggplant (2 x 0.1125 kg a.s./ha in Southern Europe), using the modelling input parameters listed in the DAR. Predicted concentrations of pyriproxyfen and 4'-OH-Pyr were <0.0000005 µg/L in all scenarios and predicted concentrations of PYPAC were highest in the Piacenza scenario (0.027 µg/L), but were always <0.1 µg/L. It is therefore considered that simulations on field tomatoes according to the GAP for indoor tomatoes and eggplants are sufficient to demonstrate that pyriproxyfen and its metabolites 4'-OH-Pyr and PYPAC will not reach 0.1 µg/L in groundwater following indoor uses on tomatoes and eggplants. This assessment was submitted to the EFSA by the agreed deadline of 01 December 2007, in Appendix 4.19.</p>		
	<p>New open point: 4.8 Identified at PRAPeR 62</p>			<p><u>PRAPeR 62 (13 – 15 January 2009)</u></p>

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the evaluation group
	meeting. RMS to include GW assessment for greenhouse use in the LoEP.			Open point open.
	Open point 4.4 RMS to update the LoEP (photochemical oxidative degradation in air and PEC air method of calculation boxes) with the correct Atkinson method calculated atmospheric DT50 which should be consistent with the Physchem section of the endpoints. See reporting table 4(31)		December 2008: LoEP has been updated (December 2008).	<u>PRAPeR 62 (13 – 15 January 2009)</u> Open point fulfilled.
	Open point 4.5 RMS to add the reference Study Report No. NNP-0067, '4'-OH-Pyriproxyfen - Water solubility' to the separate list of information tests and studies relied on. (Report No. NNP-0068), the study title should be changed to 'PYPAC - Water solubility', in the separate list of information tests and studies relied on.		December 2008: Study Report No. NNP-0067, '4'-OH-Pyriproxyfen - Water solubility' has been included in the addendum (December 2008). The study was part of the original dossier and the endpoint has been used in the DAR. However, the study was not mentioned anywhere in the DAR. Probably because it was unclear if this should be part of section 1 or of section 7. The study title of Report No. NNP-0068 has been changed in the list of studies relied on.	<u>PRAPeR 62 (13 – 15 January 2009)</u> Open point open. RMS to add the reference Study Report No. NNP-0067, '4'-OH-Pyriproxyfen - Water solubility' to the document 'List of protected studies version 2-December 2008 Fate' and rename this document as 'list of information tests and studies relied on fate'.

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the evaluation group
	See reporting table 4(34)			
	Open point 4.6 RMS to delete the reference Fathulla 1995a (anaerobic aquatic metabolism) from the separate list of information tests and studies relied on. See reporting table 4(35)		December 2008: Study deleted from the list of studies relied on.	<u>PRAPeR 62 (13 – 15 January 2009)</u> Open point fulfilled.
	Open point 4.7 RMS to update the separate list of information tests and studies relied on section for fate and behaviour by deleting the annex III references that were calculations that were not relied on. See reporting table 4(36)		December 2008: For PECgw calculations all information from notifiers reports was used except for the input values on DT ₅₀ and Koc, which were not agreed. Latest guidance was applied to derive the correct input values. For PECsw/sed in principle the same applies. Some input values were not agreed and therefore recalculation was done. Meeting to decide if these studies should be deleted or referred to.	<u>PRAPeR 62 (13 – 15 January 2009)</u> Open point open. RMS to reconsider which studies have been relied on (in the sense that at least some of the reports results have been transferred to the LoEP) and update the list of information tests and studies relied on accordingly
	Message from PRAPeR 61 (Phys chem properties) The vapour pressure and the water solubility of pyriproxyfen has changed. Both values become lower.		December 2008: As this will not change the outcome of the risk assessment no new calculations have been performed.	<u>PRAPeR 62 (13 – 15 January 2009)</u> Open point open. RMS to remove the suggestion for the residue definition for monitoring from the fates section of the LoEP.
	New open point: 4.9 Identified at PRAPeR 62			<u>PRAPeR 62 (13 – 15 January 2009)</u>

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	<u>Column B</u> Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the evaluation group
	meeting.			Open point open. RMS to remove the suggestion for the residue definition for monitoring from the fate section of the LoEP.

REPORT OF PRAPeR EXPERT MEETING 63

PYRIPROXYFEN

Rapporteur Member State: NL

Specific comments on the active substance in the section

5. Ecotoxicology

are already listed in the relevant reporting table. Comments submitted for this meeting are listed below.

1. Comments submitted for this meeting:

Date	Supplier	File Name
none		

2. Documents submitted for meeting:

Date	Supplier	File Name
December 2008	NL	Pyriproxyfen addendum B-9 (December 2008).doc
December 2008	NL	Pyriproxyfen addendum Vol 4 (December 2008) cover page ecotox.doc
December 2008	NL	Pyriproxyfen evaluation table rev 0-1 (December 2008) ecotox.doc
December 2008	NL	Pyriproxyfen list of end points (December 2008) ecotox.doc
December 2008	NL	Pyriproxyfen list of protected studies (December 2008) ecotox.doc
2008-01-04	NL	Pyriproxyfen reporting table rev1-2 (2008-01-04).doc

3. Documents tabled at the meeting:

Date	Supplier	File Name
none		

The conclusions of the meeting were as follows:

- 4. Data on preparations:** Pyriproxyfen 10 EC
- 5. Classification and labelling:** R50/R53
- 6. Recommended restrictions/conditions for use:** none
- 7. Reference list:** not discussed

Areas of concern: aquatics, pollinators in greenhouse use in the SEU.

Appendix 1: Discussion table: PYRIPROXYFEN

Appendix 2: Evaluation table

Appendix 1: Discussion Table, Pyriproxyfen (In)

5. Ecotoxicology

	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>Open point 5.1 RMS to include a risk assessment for birds and mammals from uptake of contaminated drinking water in an addendum.</p> <p>See reporting table 5(3)</p>	<p>It has been done, according to EFSA journal 2008. No risk identified.</p> <p>RMS to check the calculations and update the LoE if necessary.</p> <p>RMS checked during the meeting: no update is needed.</p>	<p>Open point fulfilled.</p>
	<p>Open point 5.2 RMS to include the TER values for fish, algae and Lemna in the LoEP.</p> <p>See reporting table 5(5)</p>	<p>It has been done. The meeting considered useful to have also the TER values for sediment dwellers and to include the endpoints for the formulation. RMS to update the LoE.</p>	<p>Open point fulfilled.</p> <p>New open point proposed, see below.</p>
	<p>New open point: 5.12 Identified at PRAPeR 63 meeting.</p> <p>The meeting considered useful to have also the TER values for sediment</p>		<p>Open point open.</p>

	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>dwellers and to include the endpoints for the formulation. RMS to update the LoE.</p>		
	<p>Open point 5.3 RMS to amend in the LoEP the level of residues after 14d depuration phase.</p> <p>See reporting table 5(6)</p>	<p>It has been done.</p>	<p>Open point fulfilled.</p>
	<p>Open point 5.4 RMS to clarify in the LoEP the PEC_{sw} values used in the TER calculations for aquatic organisms</p> <p>See reporting table 5(8)</p>	<p>It has been done. Foot notes were added in the LoE. The standard current format should be used.</p>	<p>Open point fulfilled.</p>
	<p>Open point 5.5 MSs to discuss in an expert meeting the endpoint from the microcosm study and its use in the risk assessment and the safety factor which should be applied to the endpoint</p> <p>See reporting table</p>	<p>Chronic Daphnia test was the most sensitive endpoint. To refine the risk the RMS proposed a NOEAEC from an indoor microcosm study of 5.0 µg a.s./L (based on class 2 effects) without assessment factor. Insects were not included in the microcosm study. No information on organic content was reported. If the organic content is very high it may affect the bioavailability in the study. The meeting considered necessary to request this information for a better interpretation of the study. According to the info get during the meeting, no organic content measurements were performed. However it was confirmed that the study could be considered reliable only for risk assessment to crustaceans. As for the effects on insects the meeting agreed that the risk should be further addressed. An assessment factor needs to be considered when data on toxicity of insects are available taking into account relative toxicity of insects and possible interactions between species.</p>	<p>Open point open. RMS to provide further details discussed during the meeting on the revised DAR.</p> <p>New data gap proposed, see below.</p>

	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	5(17)		
	<p>New data gap: 5.5 Identified at PRAPeR 63 meeting.</p> <p>Applicant to further address the risk to aquatic insects.</p>		Data gap open.
	<p>Open point 5.6 RMS to recalculate in an addendum the TERs for aquatic organisms with the corrected PECsw.</p> <p>See reporting table 5(18)</p>	It has been done. The correct values reported only in the LoE. RMS to revise the DAR.	Open point open. RMS to revise the DAR.
	<p>Open point 5.7 RMS to delete the LD50 values for bees from studies which are considered not acceptable</p> <p>See reporting table 5(22)</p>	It has been done.	Open point fulfilled.
	<p>Data gap: 5.1 Applicant to address the risk to bee brood for the use in tomato and egg plant in Southern EU.</p>	<p>A field study was available covering the uses in cotton and northern EU greenhouse use, but did not cover the max application rate in greenhouse in the Southern EU uses (potential risk for pollinators).</p> <p>The meeting agreed that further studies would be necessary at member State level, in case the GAPS are not covered. The experts agreed with the recommendation of RMS to include an appropriate safety phrase on the label.</p>	<p>Data gap open. Further studies are necessary for SEU greenhouse use in tomato and eggplant</p>

	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>Open point 5.8 MSs to discuss in an expert meeting the ER50 calculation for <i>A. rhopalosiphi</i>.</p> <p>See reporting table 5(30)</p>	<p>The RMS included in the ER50 calculation the lowest dose. The applicant did not agreed because the lower dose seems to be outside the dose-effect relationship. The final results are quite similar:ER50 of 81 g a.s/ha (RMS) vs 92 g a.s/ha (applicant). The meeting agreed with the RMS proposal.</p>	<p>Open point fulfilled.</p>
	<p>Open point 5.9 RMS to check and revise the HQ values for <i>A. rhopalosiphi</i> and <i>Orius laevigatus</i> in a revised DAR.</p> <p>See reporting table 5(31)</p>	<p>Still open. The LoE should be amended. The standard current format should be follow.</p>	<p>Open point open. RMS to update the LoE and to use the standard format and revise DAR on this issue</p>
	<p>Open point 5.10 MSs to discuss in an expert meeting whether the risk to non-target arthropods is sufficiently addressed considering the particular mode of action of pyriporxyfen.</p> <p>See reporting table 5(32)</p>	<p>Tests were available with NTA addressing only the contact exposure. Data from literature did not indicated differences between the exposure routes (contact, oral). Since the effect of Pyriproxyfen 10 EC is by contact action, the RMS considered the risk assessment to NTA sufficiently addressed by the available data. The meeting agreed.</p>	<p>Open point closed.</p>
	<p>Data gap: 5.2 Applicant to submit the studies on effects of technical pyriproxyfen on soil respiration and</p>	<p>It has been done. RMS evaluated the studies in the addendum. However according to the regulation 1095/2007, those studies could not be considered.</p>	<p>Data gap open.</p>

	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	nitrification. See reporting table 5(33)		
	Data gap: 5.3 The new study Report No. NNW-0178) submitted in January 2006 should be evaluated in an addendum. See reporting table 5(34)	RMS evaluated the studies in the addendum. However according to the regulation 1095/2007, those studies could not be considered.	Data gap open.
	Open point 5.11 RMS to use the EPCO No E 4, revision 4 (September 2005) template for the list of endpoints when the LoEP is revised. See reporting table 5(37)	The LoE should be updated.	Open point open. RMS to update the LoE, according to the EPCO No E 4, revision 4 (September 2005) template.
	Data gap: 5.4 Applicant to provide specifications of Pyriproxyfen 100 g/L and Pyriproxyfen 10% EC, and submit an assessment of the compliance of the used materials (different batches of	It has been done.	Data gap turned into a point of clarification. Point of clarification addressed.

	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	active substance) with the specification of the technical material. See reporting table 5(39)		

Appendix 2: Evaluation table

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the evaluation group
	Section 5 Open points: 11 Points for clarification: 0 Data gaps: 4			Section 5 Open points: 5 Points for clarification: 1 Data gaps: 4
	Open point 5.1 RMS to include a risk assessment for birds and mammals from uptake of contaminated drinking water in an addendum. See reporting table 5(3)	Notifier: A risk assessment for birds and mammals has been provided in the DAR for exposure as a result of consumption of contaminated surface water. In addition, the Notifier has provided a worst-case assessment for exposure resulting from the uptake of diluted spray solution in leaf axils or from puddles, according to the guidance provided in SANCO/4145/2000. In conclusion, all TERA values are considerably greater than the Annex VI 91/414 EEC trigger of 10. Thus, in the case of birds the most severe value is >244 (small insectivorous bird on cotton) and for mammals it is a >1042 (small mammal on cotton). Hence, the acute risk to birds and mammals from the consumption of contaminated drinking water on a worst-case basis (uptake from leaf axils) is considered to be acceptable. This assessment was submitted to the	December 2008: The risk assessment for birds and mammals from uptake of contaminated drinking water is included in the addendum (December 2008). The LoEP is also revised (December 2008), the new TERs are included.	<u>PRAPeR 63 (13 – 15 January 2009)</u> Open point fulfilled.

No.	Column A Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	Column C Rapporteur Member State comments on main data submitter / applicant comments	Column D Recommendations EPCO Expert Meeting / Conclusions of the evaluation group
		EFSA by the agreed deadline of 01 December 2007		
	<p>Open point 5.2 RMS to include the TER values for fish, algae and Lemna in the LoEP.</p> <p>See reporting table 5(5)</p>		<p>December 2008: This was done. TERs for fish, algae and Lemna are presented in the LoEP (December 2008).</p>	<p><u>PRAPeR 63 (13 – 15 January 2009)</u></p> <p>Open point fulfilled.</p> <p>New open point proposed, see below.</p>
	<p>New open point: 5.12 Identified at PRAPeR 63 meeting.</p> <p>The meeting considered useful to have also the TER values for sediment dwellers and to include the endpoints for the formulation. RMS to update the LoE.</p>			<p><u>PRAPeR 63 (13 – 15 January 2009)</u></p> <p>Open point open.</p>
	<p>Open point 5.3 RMS to amend in the LoEP the level of residues after 14d depuration phase.</p> <p>See reporting table 5(6)</p>	<p>Notifier: The level of residues after 14d depuration phase in the bioconcentration table should be $\leq 10.4\%$ (or rounded to 10%) rather than $\leq 11\%$</p>	<p>December 2008: LoEP has been revised (December 2008).</p>	<p><u>PRAPeR 63 (13 – 15 January 2009)</u></p> <p>Open point fulfilled.</p>
	<p>Open point 5.4 RMS to clarify in the LoEP the PEC_{sw} values used in the TER calculations for aquatic organisms</p> <p>See reporting table 5(8)</p>		<p>December 2008: Done. For each TER value for aquatic organisms, a note clarifies how the PEC_{sw} value was calculated.</p>	<p><u>PRAPeR 63 (13 – 15 January 2009)</u></p> <p>Open point fulfilled.</p>

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the evaluation group
	<p>Open point 5.5 MSs to discuss in an expert meeting the endpoint from the microcosm study and its use in the risk assessment and the safety factor which should be applied to the endpoint</p> <p>See reporting table 5(17)</p>	<p>Notifier: By considering the results of the microcosm study, such as NOECpopulation, NOECcommunity and recovery potential of the affected community and populations, the study design and natural ecology, it is proposed that the NOEAEC could be set at 20 µg a.s./L</p>	<p>December 2008: We consider the NOEAEC of 5.0 ug a.s./L to be the relevant endpoint from the microcosm study. Since this NOEAEC is set at a concentration at which the only effect was a slight transient direct negative effect on <i>Daphnia galeata</i>, which was observed only on one sampling point, we consider a safety factor not necessary.</p>	<p><u>PRAPeR 63 (13 – 15 January 2009)</u></p> <p>Open point open. RMS to provide further details discussed during the meeting on the revised DAR.</p> <p>New data gap proposed, see below.</p>
	<p>New data gap: 5.5 Identified at PRAPeR 63 meeting.</p> <p>Applicant to further address the risk to aquatic insects.</p>			<p><u>PRAPeR 63 (13 – 15 January 2009)</u></p> <p>Data gap open.</p>
	<p>Open point 5.6 RMS to recalculate in an addendum the TERs for aquatic organisms with the corrected PECsw.</p> <p>See reporting table 5(18)</p>	<p>Notifier: Some clarification is needed. For the calculation of refined long-term TERs for pyriproxyfen, a FOCUS Step 3 surface water PEC value of 0.393 µg a.s./L has been used. The drift value for this is 2.77% (over 1.3 m, the standard distance to the crop in Step 3, D6, ditch). However, reference is made to 1.6, which is the aeric mean mass deposition, expressed as percentage of the application rate The PEC value is also inconsistent with that calculated in the Fate and Behaviour section i.e. 0.381 µg a.s./L (Table 2.5.3-14). This needs to be</p>	<p>December 2008: The corrected Step 3 PECsw is only marginally different from the one presented in the DAR (0.393 vs. 0.381 ug a.s./L). The TER values calculated with this PECsw (TERIt for fish and <i>Daphnia</i>) do not change as a result of the correction (they remain 11 and 13, respectively). Therefore, we have not presented the corrected TER values in the addendum. However, the correct value is now mentioned in the LoEP (December 2008), and we will address this in the revised DAR.</p>	<p><u>PRAPeR 63 (13 – 15 January 2009)</u></p> <p>Open point open. RMS to revise the DAR.</p>

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the evaluation group
		standardised (this change does not influence the outcome of the risk assessment)		
	<p>Open point 5.7 RMS to delete the LD50 values for bees from studies which are considered not acceptable</p> <p>See reporting table 5(22)</p>	<p>Notifier: According to the 5 batch analysis and the specification defined in the dossier (Document J Specification No. 01), the test material used in the honey bee acute toxicity study by Hoberg J.R. (2001) is in the range of technical grade pyriproxyfen and so the study should be valid. Further studies are not needed since acceptable data for the toxicity of the formulation to honey bees are available</p>	<p>December 2008: The specification overview provided by the notifier and presented in Vol. 4- Addendum Ecotox (December 2008) states that the tested batch in this bee toxicity study was batch no. 00303 with purity 987 g/kg. The study report itself however mentions batch no. 00303G with purity 99.7%. Since this contradiction still needs clarification, the endpoints from the study on bees with the active substance have been deleted from the LoEP and the list of studies relied upon. Further studies are not required since the risk assessment can be performed with the endpoints from the study with the formulation.</p>	<p><u>PRAPeR 63 (13 – 15 January 2009)</u></p> <p>Open point fulfilled.</p>
	<p>Data gap: 5.1 Applicant to address the risk to bee brood for the use in tomato and egg plant in Southern EU.</p>	<p>Notifier: Accepts that the risk to bee brood for the use in tomato and egg plant in southern EU needs to be addressed either by generating appropriate data or by including a warning phrase on the label. The Notifier also agrees with the RMS that this should be addressed at Member State level in order to take into account local practice e.g. use of bumble bees in glasshouse pollination, and to conform with national risk management</p>	<p>December 2008: This issue will be addressed at MS level. No action required.</p>	<p><u>PRAPeR 63 (13 – 15 January 2009)</u></p> <p>Data gap open. Further studies are necessary for SEU greenhouse use in tomato and eggplant</p>

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the evaluation group
		procedures and associated label phrases		
	<p>Open point 5.8 MSs to discuss in an expert meeting the ER50 calculation for <i>A. rhopalosiphi</i>.</p> <p>See reporting table 5(30)</p>	<p>Notifier: In the Tier 1 laboratory study with <i>A. rhopalosiphi</i>, since the lowest dose (31.25 g a.s./ha) is lower than the NOER (62.5 g a.s./ha) and thus outside the dose-effect relationship range (62.5-125 g a.s./ha), this rate should not be included in the regression analysis for the ER50 evaluation. Based on this, an ER50 value of 92 g a.s./ha would be more appropriate</p>	<p>December 2008: We considered that the possibility cannot be excluded that the effect seen at the lowest dose is treatment related. Therefore we included the lowest dose rate in the calculation of the ER50. It should be noted that the outcome of this discussion on the risk assessment is low, since the difference between the two ER50-values is small (92 vs. 81 g a.s./ha) and <i>A. rhopalosiphi</i> is not the most sensitive species.</p>	<p><u>PRAPeR 63 (13 – 15 January 2009)</u></p> <p>Open point fulfilled.</p>
	<p>Open point 5.9 RMS to check and revise the HQ values for <i>A. rhopalosiphi</i> and <i>Orius laevigatus</i> in a revised DAR.</p> <p>See reporting table 5(31)</p>	<p>Notifier: In Table 2.6.3.2-2, the sublethal HQ values of 0.93, 3E-4, <0.17 and 5E-5 should not be in bold (as in Table B.9.42). The off crop HQ values (1 m) for <i>Aphidius rhopalosiphi</i> and <i>Orius laevigatus</i> need to be corrected in both tables (the calculation has divided by the uncertainty factor of 10 rather than multiplied)</p>	<p>December 2008: Values will be checked and revised if necessary when we revise the DAR.</p>	<p><u>PRAPeR 63 (13 – 15 January 2009)</u></p> <p>Open point open. RMS to update the LoE and to use the standard format and revise DAR on this issue</p>
	<p>Open point 5.10 MSs to discuss in an expert meeting whether the risk to non-target arthropods is sufficiently addressed considering the particular mode of action of</p>	<p>Notifier: Agrees with the RMS that the non-target arthropod risk assessment for pyriproxyfen specifically takes into account its IGR mode of action according to the guidance provided in ESCORT 2. Thus, Tier 1 (glass plate) tests were</p>	<p>December 2008: In the risk assessment, we have followed the guidance for IGRs recommended in Escort 2 (trigger of 50% effect is equal to HQ of 1). We agree that the appropriateness of this guidance could be discussed in an</p>	<p><u>PRAPeR 63 (13 – 15 January 2009)</u></p> <p>Open point closed.</p>

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the evaluation group
	<p>pyriproxyfen.</p> <p>See reporting table 5(32)</p>	<p>conducted with <i>T. pyri</i> and <i>O. laevigatus</i> in order to ensure exposure of appropriate juvenile stages (a study with <i>A. rhopalosiphi</i> is also provided). An assessment is presented using both mortality and sublethal (reproductive) parameters, again taking into account the IGR mode of action. A reduced HQ trigger of 1 is used, which relates to the recommended 50% effect threshold. An acceptable off-field risk is identified for all uses and this is also the case for the in-field risk except with <i>T. pyri</i>. Accordingly, extended lab. tests were conducted for <i>T. pyri</i> and <i>Chrysoperla carnea</i> which demonstrate an acceptable in-field risk for all uses with fresh, dried residues (0 d ageing)</p>	<p>Expert Meeting (e.g. should tests cover the full lifecycle and not just a part?), but in our view the discussion should have a broader context and not be just about pyriproxyfen.</p>	
	<p>Data gap: 5.2</p> <p>Applicant to submit the studies on effects of technical pyriproxyfen on soil respiration and nitrification.</p> <p>See reporting table 5(33)</p>	<p>Notifier: A new GLP study (NNW-0178) to assess the effects of technical pyriproxyfen on soil respiration and nitrification according to OECD 216 and 217 guidelines has been conducted and was submitted to the RMS in January 2006 (no adverse effects were detected on soil microbial respiration and nitrification at 1.5 mg a.s./kg soil, the highest concentration tested). The RMS has acknowledged the receipt of this study, which will be included in an</p>	<p>December 2008:</p> <p>The new study is included in the addendum, the LoEP and the list of studies relied upon (all from December 2008). The results indicate low risk for soil respiration and nitrification.</p>	<p><u>PRAPeR 63 (13 – 15 January 2009)</u></p> <p>Data gap open.</p>

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the evaluation group
		addendum		
	<p>Data gap: 5.3 The new study Report No. NNW-0178) submitted in January 2006 should be evaluated in an addendum.</p> <p>See reporting table 5(34)</p>	<p>Notifier: According to reporting table 5(34) this is an Open Point not a Data Gap (see previous point)</p>	<p>December 2008: Fulfilled, see above.</p>	<p><u>PRAPeR 63 (13 – 15 January 2009)</u></p> <p>Data gap open.</p>
	<p>Open point 5.11 RMS to use the EPCO No E 4, revision 4 (September 2005) template for the list of endpoints when the LoEP is revised.</p> <p>See reporting table 5(37)</p>		<p>December 2008: This has been done to the extent that it was practically feasible. Not all TER calculations are in the new format. However, all required information is presented.</p>	<p><u>PRAPeR 63 (13 – 15 January 2009)</u></p> <p>Open point open. RMS to update the LoE, according to the EPCO No E 4, revision 4 (September 2005) template.</p>
	<p>Data gap: 5.4 Applicant to provide specifications of Pyriproxyfen 100 g/L and Pyriproxyfen 10% EC, and submit an assessment of the compliance of the used materials (different batches of active substance) with the specification of the technical material.</p> <p>See reporting table 5(39)</p>	<p>Notifier: Details of the specifications of the formulations used and the compliance of the used materials (different batches of active substance) with the specification of the technical material was submitted to the EFSA by the agreed deadline of 01 December 2007</p>	<p>December 2008: The information provided by the notifier has been included in Addendum Vol.4-Ecotox (December 2008).</p>	<p><u>PRAPeR 63 (13 – 15 January 2009)</u></p> <p>Data gap turned into a point of clarification.</p> <p>Point of clarification addressed.</p>

Report of PRAPeR Expert MEETING 64

PYRIPROXYFEN

Rapporteur Member State: NL

Specific comments on the active substance in the section

2. Mammalian Toxicology

are already listed in the relevant reporting table. Comments submitted for this meeting are listed below.

1. Comments submitted for this meeting:

Date	Supplier	File Name
none		

2. Documents submitted for meeting:

Date	Supplier	File Name
December 2008	NL	Pyriproxyfen addendum Vol 4 (December 2008) cover page.doc
December 2008	NL	Pyriproxyfen addendum Vol3_B6 (December 2008).doc
December 2008	NL	Pyriproxyfen evaluation table rev 0-1 (December 2008) tox.doc
December 2008	NL	Pyriproxyfen list of endpoints (December 2008) tox.doc
2008-01-04	NL	Pyriproxyfen reporting table rev1-2 (2008-01-04).doc
December 2008	NL	Pyriproxyfen_list of protected studies_ (December 2008) tox.doc

3. Documents tabled at the meeting:

Date	Supplier	File Name
none		

The conclusions of the meeting were as follows:

4. **Data on preparations:** Pyriproxyfen 10 EC
5. **Classification and labelling:** none
6. **Recommended restrictions/conditions for use:** none
7. **Reference List:** not discussed

Areas of concern: none

Appendix 1: Discussion table: PYRIPROXYFEN

Appendix 2: Evaluation table

Appendix 1: Discussion Table, Pyriproxyfen (In)

2. Mammalian toxicology

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>Open point 2.1 RMS to provide more details on the study of Isobe (1988a) to clarify the calculation of oral absorption.</p> <p>See reporting table 2(1)</p>	<p>In the DAR, the results from bile-cannulated and non-cannulated animals were mixed and an overall value (40%) was derived for oral absorption.</p> <p>In the Addendum, more detailed calculations of oral absorption were provided, and a value of 40% was proposed as the most conservative approach, based on urinary (+ cage wash) and bile excretion. The amounts of radiolabelled substance in tissues were not measured, but they were expected to be minimal (based on the results in non-cannulated animals).</p> <p>The experts agreed that oral absorption can be set at 40%.</p>	<p>Open point fulfilled.</p> <p>The agreed oral absorption value is 40%.</p>
	<p>Open point 2.2 (RMS's proposal) Oral absorption value to be discussed by the experts.</p> <p>See reporting table 2(1)</p>	<p>See discussion in open point 2.1.</p>	<p>Open point closed (see 2.1).</p>
2.1	<p>Point of clarification for the applicant: historical control data for changes in clinical chemistry have to be provided.</p> <p>The applicant announced the submission of these data for the 1st December 2007.</p> <p>See reporting table 2(3)</p>	<p>The information was provided and evaluated in the addendum.</p> <p>See discussion in open point 2.3.</p>	<p>Point of clarification addressed.</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>Open point 2.3 NOAEL in the subacute inhalation study to be discussed by the experts. RMS could provide a revised table 6.3.3.1 with additional figures for the discussion.</p> <p>See reporting table 2(3)</p>	<p>The RMS proposed a NOAEL of 482 mg/m³/day, even though it was recognized that the effects at 1000 mg/m³/day were marginal. The LDH increase was the most pronounced effect. It was agreed that concurrent control (considering clinical parameters) should be taken into account before the historical control data. There was also a decrease of lung and spleen weight, and an increase of liver weight (109%). As the liver is the main target organ, the experts considered that the liver findings could not be disregarded and they agreed on the NOAEL of 482 mg/m³ (equivalent to 87 mg/kg bw/day) based on clinical effects and liver findings (conservative approach).</p>	<p>Open point fulfilled.</p> <p>Agreed NOAEC in the 28-day rat inhalation study = 482 mg/m³/day (4h/day, whole body).</p>
	<p>Open point 2.4 NOAEL in the 52-week dog study to be confirmed by the experts. RMS could provide a revised version of the table 6.3.4.4 with additional figures in order to ease the discussion.</p> <p>See reporting table 2(4)</p>	<p>The applicant agreed with the derivation of a LOAEL at the lowest dose tested in the first 1-year dog study (30 mg/kg bw/day, males) but considered that the effects of higher cholesterol level and increased liver weights were very slight and marginal. It was mentioned that in a second 1-year dog study the NOAEL was clearly set at 10 mg/kg bw/day (highest dose tested).</p> <p>The experts agreed that 30 mg/kg bw/d is the beginning of a dose-response and that the NOAEL is < 30 mg/kg bw/d for males and 30 mg/kg bw/d for females, based on a relatively high increase of liver weight and a consistent effect on cholesterol, which is sufficient evidence for a target organ effect.</p>	<p>Open point fulfilled.</p> <p>Agreed NOAEL in the first 52-week dog study (Chapman, 1991) < 30 mg/kg bw/day (males).</p>
	<p>Open point 2.5 NOAEL in the 2-year rat study to be confirmed by the experts. RMS could provide a revised table 6.5.1.1 with additional figures in order to ease the discussion by the experts.</p> <p>See reporting table 2(6)</p>	<p>RMS proposed a NOAEL at 600 ppm (27.2 mg/kg bw/d), based on clinical chemistry and organ weights. The applicant didn't disagree with this proposed NOAEL but with the description of critical effects ("dark areas in the liver" and "liver necrosis", the latter seen only in unscheduled deaths) and would like to remove them from the list of critical effects (like JMPR did).</p> <p>The experts agreed that the NOAEL can be set at 27.2 mg/kg bw/d based on liver clinical chemistry and liver weight and that the other liver findings (dark areas in the liver, liver necrosis) should remain in the description as observed effects, although not critical for setting the NOAEL.</p>	<p>Open point fulfilled.</p> <p>The agreed NOAEL in the 2-year rat study is 27.2 mg/kg bw/day based on liver findings (clinical chemistry and increased weight).</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>Open point 2.6 Adversity of the liver findings in the rat 2-generation study to be discussed by the experts (with regard to the setting of the NOAEL). RMS could provide a revised table 6.6.1.1 with additional figures in order to ease the discussion.</p> <p>See reporting table 2(12)</p>	<p>The applicant disagreed with the proposed parental NOAEL of 200 ppm, and proposed a value of 1000 ppm.</p> <p>It was highlighted during the discussion that limited data were available: no clinical chemistry and an incomplete histopathology were performed; the only finding was an increased liver weight (110% of control at 1000 ppm). Because the information was limited, the RMS proposed as a conservative approach to set the parental NOAEL at 200 ppm. The proposed offspring NOAEL was 1000 ppm and the proposed NOAEL for the reproductive parameters was 5000 ppm.</p> <p>The experts agreed that, based on limited investigations (which is however not unusual in a 2-generation study) and liver weight increase at 1000 ppm, the parental NOAEL should be set, as proposed by RMS, at 200 ppm (as a conservative approach). This was also in line with the NOAELs and LOAELs of other studies like the 90-day rat study and the 2-year rat study.</p>	<p>Open point fulfilled.</p> <p>In the 2-generation rat study, the agreed parental NOAEL is 200 ppm (13.3 mg/kg bw/day), the offspring NOAEL is 1000 ppm (66.7 mg/kg bw/day) and the reproductive NOAEL is 5000 ppm (333.3 mg/kg bw/day).</p>
	<p>Open point 2.7 RMS to provide a revised table 6.6.1.2 with additional figures and historical control data in order to confirm the NOAELs in the combined rat teratogenicity and reproductive study.</p> <p>See reporting table 2(16)</p>	<p>The information was presented in the Addendum. In the DAR, a developmental NOAEL of 500 mg/kg bw/day was based on decreased number of corpora lutea and live fetuses, and increased placental weight. After the evaluation of historical control data, the RMS agreed with the applicant and increased the developmental NOAEL to 1000 mg/kg bw/day.</p> <p>The experts agreed on a NOAEL for offspring of 1000 mg/kg bw/day, on a parental NOAEL < 100 mg/kg bw/d and on a NOAEL for reproduction/teratogenicity of 1000 mg/kg bw/day.</p>	<p>Open point fulfilled.</p> <p>In the combined rat teratogenicity and reproductive study, the agreed NOAELs were:</p> <ul style="list-style-type: none"> - for the offspring: 1000 mg/kg bw/d - for the parents: <100 mg/kg bw/d - for repro/terato: 1000 mg/kg bw/d
	<p>Open point 2.8 NOAELs in the rat teratogenicity study to be confirmed by the experts. RMS could provide a revised table 6.6.2.1 with additional figures instead of statements in order to ease the discussion.</p>	<p>The revised table is presented in the Addendum (2 typing errors in table 6.6.2.1. were corrected).</p> <p>NOAEL maternal = 100 mg/kg bw/d NOAEL developmental = 100 mg/kg bw/d</p>	<p>Open point fulfilled.</p> <p>In the rat teratogenicity study,</p> <ul style="list-style-type: none"> - the agreed maternal NOAEL is 100 mg/kg bw/day. - the agreed developmental NOAEL is 100 mg/kg bw/day.

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	See reporting table 2(18)		
	<p>Open point 2.9 NOAELs in the peri-post natal rat study to be confirmed by the experts. RMS could provide a revised table 6.6.2.3 with additional figures in order to ease the discussion.</p> <p>See reporting table 2(23)</p>	<p>For the peri-post natal rat study no guideline is available. The RMS proposed a maternal and developmental NOAEL of 100 mg/kg bw/day. The applicant would like to remove some descriptions from the list of critical effects (i.e. renal pelvis dilatation with hyperaemia, and inflammatory cell infiltration in the propria of the urinary bladder). During the meeting, it was considered that the results from this non-guideline study confirm the results from the OECD guideline reproduction and developmental studies. The experts agreed to set the maternal and developmental NOAEL at 100 mg/kg bw/d. They also agreed that the findings in the kidney and urinary bladder were not critical effects in the offspring, but that didn't change the setting of the developmental NOAEL, based on decreased pup weight.</p>	<p>Open point fulfilled.</p> <p>In the peri-post natal rat study, the agreed maternal and developmental NOAEL is 100 mg/kg bw/d.</p>
	<p>Open point 2.10 Experts to confirm the NOAELs in the rabbit teratogenicity study (maternal and developmental).</p> <p>See reporting table 2(24)</p>	<p>In the DAR, the RMS proposed a maternal NOAEL of 100 mg/kg bw/day and a developmental NOAEL of 300 mg/kg bw/day. Considering that the number of dams in the highest dose group (1000 mg/kg bw/d) was insufficient to draw reliable conclusions, the RMS decided to dismiss the highest group from setting the NOAELs. However, the applicant was in disagreement and proposed a higher developmental NOAEL >300 mg/kg bw/day.</p> <p>The experts agreed that the maternal NOAEL can be set at 100 mg/kg bw/d and developmental NOAEL at 300 mg/kg bw/d.</p>	<p>Open point fulfilled.</p> <p>In the rabbit teratogenicity study, - the agreed maternal NOAEL is 100 mg/kg bw/day - the agreed developmental NOAEL is 300 mg/kg bw/day</p>
	<p>Open point 2.11 Setting of the ARfD to be discussed by the experts</p> <p>See reporting table 2(27)</p>	<p>Based on the toxicity profile of pyriproxyfen, the experts agreed that an ArfD is not necessary.</p>	<p>Open point fulfilled.</p>
	<p>Open point 2.12 Derivation of the AOEL to be discussed by the experts</p>	<p>In the addendum, an overview of the critical studies for the derivation of the AOEL was presented. The dog is the most sensitive species. The notifier proposed to derive an AOEL</p>	<p>Open point fulfilled.</p> <p>The agreed AOEL is 0.04 mg/kg</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>(relevant species, relevant study, correction for oral absorption)</p> <p>See reporting table 2(28)</p>	<p>based on the 13-week rat study, whereas the RMS proposed an AOEL based on the 1-year dog. Considering the exposure time for the worker (which might be longer than for operator), the 1-year dog studies can be taken into account.</p> <p>The experts agreed that the 1-year dog study should be taken for the derivation of AOEL and that the NOAEL of 10 mg/kg bw/day should be considered. The resulting AOEL is 0.04 mg/kg bw/d (corrected for 40% oral absorption, SF 100).</p> <p>The ADI was confirmed to be 0.1 mg/kg bw/d (1-year dog study, SF 100).</p>	<p>bw/day (SF 100, oral absorption 40%).</p> <p>The agreed ADI is 0.1 mg/kg bw/day (SF 100).</p>
	<p>Open point 2.13 RMS to revise the list of end points also taking into consideration the discussion at the meeting of experts.</p> <p>See reporting table 2(30)</p>	<p>The LOEP has been revised after the discussion of all the open points.</p>	<p>Open point fulfilled.</p>
	<p>Open point 2.14 Dermal absorption values to be confirmed by the experts.</p> <p>See reporting table 2(31)</p>	<p>RMS, NOT and MS agree on values for dermal absorption.</p> <p>In the DAR, the amount in all tape strips was considered potentially absorbed. Recently it has been agreed that tape strips 1 and 2 can be dismissed.</p> <p>RMS proposed to maintain the dermal absorption values of 2.5% for the concentrate and 13% for the dilution, since the revised dermal absorption values (without tape strips 1 and 2) would be the same for the concentrate and negligibly lower for the spray dilution.</p> <p>The experts agreed to the values presented in the DAR.</p>	<p>Open point fulfilled.</p> <p>The agreed dermal absorption values were 2.5% for the concentrate and 13% for the dilution.</p>
	<p>Open point 2.15 RMS to provide revised exposure calculations (with final results in % of AOEL) after agreement of the AOEL.</p> <p>See reporting table 2(32)</p>	<p>Since the AOEL and dermal absorption values do not change, the exposure estimates would be the same than in the DAR.</p> <p>Nevertheless, new and more transparent spread sheets were provided in the Addendum. Even though some parameters slightly changed in the recalculation, the results did not significantly change compared to the risk assessment in the DAR.</p>	<p>Open point fulfilled.</p>
	<p>Open point 2.16</p>	<p>New spread sheets are presented in the Addendum and an estimated exposure</p>	<p>Open point fulfilled.</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>Bystander exposure to be confirmed by the experts (with regard to the parameters used in the calculations).</p> <p>See reporting table 2(33)</p>	<p>below the AOEL has been demonstrated.</p>	
	<p>Open point 2.17 Detailed calculations of operator exposure with the Dutch greenhouse model to be provided in an addendum.</p> <p>See reporting table 2(34)</p>	<p>New spread sheets are presented in the Addendum and estimated exposure levels below the AOEL have been demonstrated.</p> <p>The exposure for indoor applications was calculated with the Dutch model. However, in Table 6.14.1.4-1 in the addendum, an error was made with regard to the PPE. PPE should be gloves and coverall, and no RPE for inhalation exposure. This did not change the conclusion.</p> <p>New open point open: RMS to provide new operator exposure estimates with the Dutch model for the indoor use (without the use of RPE) in a revised addendum.</p>	<p>Open point fulfilled.</p> <p>New open point proposed, see below.</p>
	<p>New open point 2.22:</p> <p>RMS to provide new operator exposure estimates with the Dutch model for the indoor use (without the use of RPE) in a revised addendum.</p>		<p>Open point open.</p>
	<p>Open point 2.18 Worker exposure to be discussed by the experts with regard to the used model and parameters, and additional calculations with Europeem II to be provided</p>	<p>New spread sheets are presented in the Addendum and exposure levels below the AOEL have been demonstrated.</p> <p>6 hours working day was considered and one application (since there is no need for the second application if all residues are still on the crop). But even if two applications are taken into account (at MS level), the safe use without PPE is demonstrated.</p>	<p>Open point fulfilled.</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>in an addendum.</p> <p>See reporting table 2(37)</p>		
	<p>Open point 2.19 Experts to discuss whether the level of toluene (relevant impurity) in the final technical specification is covered by its level in the toxicological batches.</p> <p>See reporting table 2(40)</p>	<p>RMS explained in the reporting table that both tox batches cover the technical specification. The key studies have been done with specification containing 0.5% toluene.</p> <p>The experts agreed that toluene is a relevant impurity but not of concern at the proposed level in the technical specification.</p>	<p>Open point fulfilled.</p> <p>Toluene is a toxicological relevant impurity but not of concern at the proposed level in the T.S (0.5%).</p>
	<p>Open point 2.20 Experts to discuss the relative toxicity of the plant metabolite PYPA ((RS)-2-(2-pyridyloxy)propyl alcohol) in comparison with pyriproxyfen, taking into account that it is proposed as intermediate in the rat metabolic pathway but has not been identified in the rat metabolism studies.</p> <p>The notifier has provided a position in his comments on the reporting table.</p> <p>See reporting table 2(41)</p>	<p>NOT : PYPA was not found in the rat, but in the metabolic pathway it is probable that PYPA is an intermediate in the rat (hydrolyzed from pyriproxyfen). RMS stated that it could be probable but it is not proved and stays a hypothesis. Is PYPA covered by the tox studies?</p> <p>The experts agreed that PYPA, based on the assumed metabolic pathway, is likely to be an intermediate in the rat as well (it occurs in the goat and in the hen) and that it is probably an intermediate in the whole degradation pathway (major and minor one). The trigger values for PYPA would be covered by the reference values of pyriproxyfen.</p>	<p>Open point fulfilled.</p> <p>PYPA is most probably an intermediate in the rat metabolism, and is therefore covered by the reference values of the parent.</p>
	<p>Open point 2.21 As pyriproxyfen is produced as a racemic mixture of enantiomers (R/S), can the</p>	<p>The technical material is a racemic 50:50 mixture of enantiomers, the same as the material tested in the toxicological batches. No information is available on the potential toxicity of the individual isomers.</p>	<p>Open point fulfilled.</p> <p>No information is available on the relative toxicity of the individual</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>adverse effects observed during the toxicological studies be attributed specifically to one of the isomers ? This is to be discussed by the experts.</p> <p>See reporting table 2(42)</p>		<p>isomers.</p>

Appendix 2: Evaluation table

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the Evaluation Meeting
	Section 2 Open points: 21 Points for clarification: 1 Data gaps: 0			Section 2 Open points: 1 Points for clarification: 0 Data gaps: 0
	Open point 2.1 RMS to provide more details on the study of Isobe (1988a) to clarify the calculation of oral absorption. See reporting table 2(1)	Notifier: The oral absorption rate of 63% proposed in the dossier is already a worst case estimate. The absorption value is very important because it affects the AOEL and the value of 40% is not consistent with the data and is unnecessarily conservative. As unchanged pyriproxyfen was not eliminated in bile the pyriproxyfen in faeces is the unabsorbed dose and this can be used to calculate absorption. This is a more scientific approach as it avoids mixing data from different experiments. The basis for the calculation of the amount of the low and high dose absorbed should be made more clear in the DAR. In particular, the problem which arises from the lack of a determination of radioactivity in the residual carcass at the end of the bile fistula experiment should be stated. On page 57 the absorption of 39-49% is said to be based on radioactivity recovered from urine, bile and tissues whereas on page 70 and page 144 the	December 2008: See addendum (December 2008). The summary of the study of Isobe as presented in the DAR is copied, and the calculation of oral absorption is explained and amended. The RMS still proposes to use 40% for oral absorption. To be discussed in the expert meeting.	<u>PRAPeR 64 (19 -23 01.2009):</u> Open point fulfilled. The agreed oral absorption value is 40%.

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		<p>same range is quoted based on urine, CO₂, tissues, cage wash, residual carcass and bile. The values used to calculate absorption and the experiments from which they are taken need to be explained in more detail.</p> <p>For highly lipophilic compounds, lower oral absorption can be observed with bile-duct cannulated rats compared with normal rats because of a shortage of bile acid or slow gastrointestinal motility caused by physical restraint of rats.</p> <p>As unchanged pyriproxyfen was not eliminated in bile the pyriproxyfen in faeces has not been absorbed whereas the metabolites in faeces of normal rats have been absorbed. This can be used as the basis of a more scientific approach for estimating absorption as it avoids mixing data from different experiments.</p> <p>Absorption rate (%) = dose (100%) - unabsorbed compound in normal rats (% of the dose) = dose (100%) - pyriproxyfen detected in faeces with normal rats (% of the dose)</p> <p>The amount of pyriproxyfen in faeces of rats was 21%-37.2% after single (2 or 1000 mg/kg) administration of [phenoxyphenyl-14C]pyriproxyfen or [pyridyl-2,6-14C]pyriproxyfen, and it was decreased to 6.5%-11.4% after</p>		

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		repeated (2 mg/kg) administration. Therefore, the absorption rate was 63%-79% after single administration and 89-93% after repeated administration to normal rats. Notifier considers that the oral absorption rate of 63% proposed in the dossier is already a worst case estimate. The proposed value of 40% is not consistent with the data and is unnecessarily conservative.		
	Open point 2.2 (RMS's proposal) Oral absorption value to be discussed by the experts. See reporting table 2(1)	Notifier: See comments on Open point 2.1.	December 2008: See open point 2.1.	<u>PRAPeR 64 (19 -23 01.2009):</u> Open point closed (see 2.1).
2.1	Point of clarification for the applicant: historical control data for changes in clinical chemistry have to be provided. The applicant announced the submission of these data for the 1st December 2007. See reporting table 2(3)	Notifier: Historical control data were submitted to the EFSA by the agreed deadline of 01 December 2007	December 2008: The historical control data is presented in the addendum (December 2008).	<u>PRAPeR 64 (19 -23 01.2009):</u> Point of clarification addressed.
	Open point 2.3 NOAEL in the subacute inhalation study to be	Notifier: This point is of lesser importance as it does not affect the reference doses.	December 2008: The study is presented in more detail in the addendum (December 2008). As	<u>PRAPeR 64 (19 -23 01.2009):</u> Open point fulfilled.

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	<p>discussed by the experts. RMS could provide a revised table 6.3.3.1 with additional figures for the discussion.</p> <p>See reporting table 2(3)</p>	<p>However the increased LDH and slight changes of some organs weights in male at 1000 mg/m³ should be considered of little toxicological significance. These differences were marginal, showed no dose-dependency, were within physiological changes, and there were no related histopathological changes or no statistically significant changes</p> <p>In addition, according to the historical control data, all LDH values except one animal at 1000mg/m³ are within the normal level calculated on the assumption that mean +/- 2SD. The animal excepted above showed no change in relevant parameters, so that the Notifier considers it as incidental. Therefore, the increased LDH should be considered of little toxicological significance.</p>	<p>the notifier already pointed out, the NOAEL of this study does not affect the overall risk assessment. The RMS still proposes a NOAEL of 482 mg/m³ (as was proposed in the study report), although it is recognised that the effects are indeed marginal.</p>	<p>Agreed NOAEC in the 28-day rat inhalation study = 482 mg/m³/day (4h/day, whole body).</p>
	<p>Open point 2.4 NOAEL in the 52-week dog study to be confirmed by the experts. RMS could provide a revised version of the table 6.3.4.4 with additional figures in order to ease the discussion.</p> <p>See reporting table 2(4)</p>	<p>Notifier: The changes of cholesterol levels and liver weights were slight or marginal and only occurred in one of the four males at 30 mg/kg bw/d. Although the Notifier recognises that this does not affect the NOAEL it does affect the consideration of the AOEL.</p>	<p>December 2008: Additional figures are presented in the addendum (December 2008). The RMS still proposes a NOAEL < 30 mg/kg bw/day for males and a NOAEL of 30 mg/kg bw/day for females. It should be taken into account that the second 52-week dog study with a NOAEL of 10 mg/kg bw/day is the critical study for the risk assessment.</p>	<p><u>PRAPeR 64 (19 -23 01.2009):</u></p> <p>Open point fulfilled.</p> <p>Agreed NOAEL in the first 52-week dog study (Chapman, 1991) < 30 mg/kg bw/day (males).</p>
	<p>Open point 2.5 NOAEL in the 2-year rat</p>	<p>Notifier: The increased incidence of dark area in the liver was noted in only</p>	<p>December 2008: All relevant figures are already</p>	<p><u>PRAPeR 64 (19 -23 01.2009):</u></p>

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	<p>study to be confirmed by the experts.</p> <p>RMS could provide a revised table 6.5.1.1 with additional figures in order to ease the discussion by the experts.</p> <p>See reporting table 2(6)</p>	<p>females at 3000 mg/kg food and no histopathological changes related to this change were observed. Therefore, this finding was not treatment-related.</p> <p>In addition the histopathological changes noted in liver were generally secondary to some other cause of death and not treatment-related since no incidence of liver necrosis was noted in the rats sacrificed at week 53 and week 105.</p> <p>However the areas of disagreement do not affect the NOAEL for the study.</p>	<p>presented in the DAR. Please note that the notifier agrees with the derived NOAEL!</p> <p>Dark areas in the liver: This finding was observed, possibly treatment-related and thus described in the table. This finding, however, does not trigger the derivation of the NOAEL. RMS still considers that this finding should be presented in the DAR.</p> <p>Histopathological changes in the liver (necrosis): An increased incidence of liver necrosis was only noted in animals that died before the end of the treatment period. The incidence of liver necrosis among the unscheduled deaths was 35% (8/23) and 25% (4/16) for the males and females, respectively, in the 3000 mg/kg bw/d group. The RMS considers this a relevant finding and does not agree with the notifier that this finding should be deleted from the DAR.</p>	<p>Open point fulfilled.</p> <p>The agreed NOAEL in the 2-year rat study is 27.2 mg/kg bw/day based on liver findings (clinical chemistry and increased weight).</p>
	<p>Open point 2.6</p> <p>Adversity of the liver findings in the rat 2-generation study to be discussed by the experts (with regard to the setting of the NOAEL).</p> <p>RMS could provide a revised table 6.6.1.1 with additional figures in order to ease the discussion.</p>	<p>Notifier: The NOAEL for parental toxicity was 1000 mg/kg food and not 200 mg/kg food as proposed by the RMS. The increase in relative liver weights in F1 males at 1000 mg/kg food was not adverse because there were no histopathological changes of liver even in the highest dose group, in which the histopathological examination of liver in all F1 males was conducted.</p>	<p>December 2008:</p> <p>All relevant figures are already presented in the DAR. The parental NOAEL should be discussed, which is based on increased relative liver weight. This figure is presented in the DAR: relative liver weight at 1000 mg/kg food is 110% of control. Liver is target organ of pyriproxyfen and the increased liver weight at 1000 mg/kg</p>	<p><u>PRAPeR 64 (19 -23 01.2009):</u></p> <p>Open point fulfilled.</p> <p>In the 2-generation rat study, the agreed parental NOAEL is 200 ppm (13.3 mg/kg bw/day), the offspring NOAEL is 1000 ppm (66.7 mg/kg bw/day) and the reproductive NOAEL is 5000 ppm (333.3 mg/kg bw/day).</p>

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	See reporting table 2(12)	The effects were marginal, there was no absolute organ weight change and no histopathological change that was consistent with the weight change. Therefore, the NOAEL for parental toxicity was 1000 mg/kg food. This conclusion is consistent with the result of a JMPR evaluation	food is the start of a dose-response. The increase is indeed marginal, but histopathology was not performed on all animals of the 200 and 1000 mg/kg food groups and no clinical biochemistry was performed. The parental NOAEL is not critical for the overall risk assessment. To be discussed in the expert meeting.	
	Open point 2.7 RMS to provide a revised table 6.6.1.2 with additional figures and historical control data in order to confirm the NOAELs in the combined rat teratogenicity and reproductive study. See reporting table 2(16)	Notifier: Agrees that the NOAEL is 1000 mg/kg/day and has no additional comments.	December 2008: Additional figures and historical control data are presented in the addendum (December 2008). Conclusion: NOAELmales <100 mg/kg bw/day NOAELmat 100 mg/kg bw/day NOAELdev 1000 mg/kg bw/day No teratogenic effects.	<u>PRAPeR 64 (19 -23 01.2009):</u> Open point fulfilled. In the combined rat teratogenicity and reproductive study, the agreed NOAELs were: - for the offspring: 1000 mg/kg bw/d - for the parents: <100 mg/kg bw/d - for repro/terato: 1000 mg/kg bw/d
	Open point 2.8 NOAELs in the rat teratogenicity study to be confirmed by the experts. RMS could provide a revised table 6.6.2.1 with additional figures instead of statements in order to ease the discussion. See reporting table 2(18)	Notifier: The increase in early implantation loss was not statistically significant and consequently it was considered not treatment related. This does not affect the NOAEL for the study.	December 2008: A revised table 6.6.2.1 is presented in the addendum (December 2008). The conclusion does not change. NOAELmat 100 mg/kg bw/day NOAELdev 100 mg/kg bw/day No teratogenic effects.	<u>PRAPeR 64 (19 -23 01.2009):</u> Open point fulfilled. In the rat teratogenicity study, - the agreed maternal NOAEL is 100 mg/kg bw/day. - the agreed developmental NOAEL is 100 mg/kg bw/day.
	Open point 2.9	Notifier: Although the NOAEL is not	December 2008:	<u>PRAPeR 64 (19 -23 01.2009):</u>

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	<p>NOAELs in the peri-post natal rat study to be confirmed by the experts. RMS could provide a revised table 6.6.2.3 with additional figures in order to ease the discussion.</p> <p>See reporting table 2(23)</p>	<p>affected the findings (increased incidences of renal pelvis dilatation and hyperaemia and/or inflammatory cell infiltration in the propria of the urinary bladder) observed in a peri- and postnatal toxicity study should be removed from lists of critical effects in the above sections.</p> <p>At necropsy of the offspring after 3 weeks postpartum, increased incidences of dilatation of the renal pelvis, and hyperemia and/or inflammatory cell infiltration in the propria of the urinary bladder were noted in the 500 and 300 mg/kg bw/day dose groups, but no such effects were seen in offspring examined at 8 weeks postpartum. Moreover, no renal pelvis dilatation was observed in foetuses in the rat teratogenicity study. Therefore, the findings were thought to be growth retardation, but not visceral anomalies</p>	<p>As the notifier already pointed out, there is no discussion about the NOAELs of the study. The Member States did not comment on the NOAELs and there is just discussion on interpretation of some findings that are not <u>the</u> critical findings for setting the NOAEL.</p> <p>For this peri-post natal study no OECD guideline is available. It is true that not all values are reported in detail, but this study is acceptable because it produces some additional information, and based on Table 6.6.2.3 the picture is clear. The dossier further contains acceptable OECD guideline teratogenicity studies with rat and rabbit, and this peri-post natal study confirms the findings and NOAELs in these studies.</p>	<p>Open point fulfilled.</p> <p>In the peri-post natal rat study, the agreed maternal and developmental NOAEL is 100 mg/kg bw/d.</p>
	<p>Open point 2.10 Experts to confirm the NOAELs in the rabbit teratogenicity study (maternal and developmental).</p> <p>See reporting table 2(24)</p>	<p>Notifier: The NOAEL for teratogenicity in the rabbit study should be >300 mg/kg in both the table and in paragraph 4 as no developmental effects were found even at 1000 mg/kg.</p>	<p>December 2008: In the DAR, the RMS proposed: NOAEL_{mat} 100 mg/kg bw/day NOAEL_{dev} 300 mg/kg bw/day No teratogenic effects. The number of dams remaining in the top dose group of 1000 mg/kg bw/d was insufficient to draw reliable conclusions. To be discussed in the expert meeting.</p>	<p><u>PRAPeR 64 (19 -23 01.2009):</u></p> <p>Open point fulfilled.</p> <p>In the rabbit teratogenicity study, - the agreed maternal NOAEL is 100 mg/kg bw/day - the agreed developmental NOAEL is 300 mg/kg bw/day</p>

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	<p>Open point 2.11 Setting of the ARfD to be discussed by the experts</p> <p>See reporting table 2(27)</p>	<p>Notifier: It is unnecessary to set an ARfD for pyriproxyfen. The only acute toxicity alert is for mortality in the mouse acute toxicity study which occurs at 2000 mg/kg bw. The ARfD proposed is 10 mg/kg bw which has no practical value because such a dose could not be achieved from the consumption of residues. The calculations for the NESTI and IESTI intake using the proposed ARfD confirm that NESTI and IESTI are negligible, and do not exceed 0.07% by Dutch and UK models and 0% by FAO/WHO models for both adults and children (See details in Volume 3, Annex B, B.7.15.).</p> <p>The EU Guidance for setting an acute reference dose (7199/VI/99 rev 5) states that one of the criteria for not setting an ARfD is that the pesticide is of very low acute oral toxicity (e.g. no adverse clinical signs and deaths have been observed at the limit dose for LD50 testing) (Chapter 4.4). However, this does not mean that an ARfD must be set if there are adverse clinical signs or deaths at the limit dose in an individual study. Although the RMS considers that deaths in the mouse study at a dose of 2000 mg/kg mean that it is necessary to set an ARfD, the Notifier does not consider this is a correct interpretation of the guidance.</p>	<p>December 2008: The RMS acknowledges that the 'Guidance for setting an ARfD' was very strictly interpreted. The RMS decided to present the 'worst-case option' (setting an ARfD) in the DAR as starting point for the discussion. However, considering the toxicological profile of pyriproxyfen and the very high value which was derived for the ARfD (10 mg/kg bw/day) it can indeed be questioned if an ARfD is required. To be discussed at the PRAPeR meeting whether it is necessary to set an ARfD.</p>	<p><u>PRAPeR 64 (19 -23 01.2009):</u></p> <p>Open point fulfilled.</p>

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		<p>With regard to the comment from DE concerning use of the developmental toxicity study mortalities occurred after on days 4, 5, 6, 7 and 9 which was only after at least 4 daily dose had been received. Consequently the mortality in this study is not relevant to an endpoint which is based on an acute effect.</p> <p>The EU guidance (Section 1.4)a) and Solecki et al b) also mentioned that developmental effects, which occur only at doses that produce maternal toxicity, may not be considered relevant for ARfD setting. In this study, excessive maternal toxicities, such as maternal death, were observed in the 1000 mg/kg/day dose group. In the group at 300 mg/kg/day or more, the incidence of fetuses with an opening of the foramen transversarium of the 7th cervical vertebra was significantly higher than that of control group but only occurred at dose that were considered maternally toxic. However, this finding is such a skeletal variation as follows; 1) this finding has been observed in the historical control data, 2) the increase incidence of this finding was only observed in the groups with maternal toxicities, and 3) there were no statistically significance in the incidence of pups between the control and treatment groups at postnatal day</p>		

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		<p>21. There is no critical developmental issue and no evidence of teratogenicity in the developmental toxicity study in rats with pyriproxyfen; therefore, it is inadequate for setting ARfD based on the results of this study.</p> <p>The relationship between the ARfD and the consumption of residues also needs to be considered when deciding whether an ARfD is required. There is no result in residues in food that will exceed the value proposed by the RMS. The calculations for the NESTI and IESTI intake using the proposed ARfD confirm that NESTI and IESTI are negligible, and do not exceed 0.7% by Dutch and UK models. The EU guidance (7199/VI/99 rev 5) states that under the above circumstances an ARfD is not necessary.</p> <p>a) Guidance for the setting of an acute reference dose, European Commission, Health and Safety Directorate, 7199/VI/99 rev.5, 5 July 2001</p> <p>b) Solecki, R. et al., Guidance of setting of acute reference dose (ARfD) for pesticides, Food Chem. Toxicol., 43, 1569-1593 (2005)</p>		
	Open point 2.12 Derivation of the AOEL to be discussed by the experts	Notifier: The AOEL should be based on the NOAEL from the short-term toxicity study, 23.5 mg/kg bw/day in the 13-weeks oral toxicity study in rats. It is	December 2008: See the addendum (December 2008) for an overview of all relevant studies.	<u>PRAPeR 64 (19 -23 01.2009):</u> Open point fulfilled.

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	<p>(relevant species, relevant study, correction for oral absorption)</p> <p>See reporting table 2(28)</p>	<p>not appropriate to select the NOEL of 10 mg/kg bw/day, from the 1-year study in dogs for pyriproxyfen.</p> <p>For tomato and eggplant, the RMS considers that it cannot be excluded that the exposure duration of re-entry activities will exceed 3 months. However, based on Notifier's experience of the actual use for tomato and eggplant in a glasshouse, a maximum of two applications per growing season are claimed (two crop cycles per year making four applications per year) which leads to a max 80 days of exposure (20 hectare treated 4 times per year, 2 treatments per crop cycle with 2 cycles per year, makes 80 hectares treated in one year). Worst case is a hand held sprayer or knapsack sprayer on the back with a maximum of 1 hectare treated per day. This makes a maximum 80 days exposure to the product during application in this extreme worst case.</p> <p>Even if chronic exposure occurs by the re-entry activities, it is not appropriate to select the NOEL of 10 mg/kg bw/day, from the 1-year study in dogs. The RMS considered that the NOAELs from the 13-weeks and 6-months studies (23.5 and 24.0 mg/kg bw/day, respectively) in rats were too close to the LOAEL of 30 mg/kg bw/day from</p>	<p>Because there seems to be no effect of exposure duration (for the rat, for the dog this is not completely clear since there is no chronic dog study), the RMS selected the dog as most sensitive species and used the 1-year dog study for derivation of the AOEL. Since the most relevant NOAEL in the dog studies is derived from the 1-year dog study, the RMS considers the AOEL applicable for semi-chronic and chronic exposure.</p> <p>The notifier proposes to derive the AOEL based on the 13-week rat study with a NOAEL of 23.5 mg/kg bw/day. However, in case a semi-chronic AOEL should be derived, the 2-generation study with rats is also a semi-chronic study with a more critical NOAEL of 13.3.</p> <p>To be discussed in the expert meeting.</p>	<p>The agreed AOEL is 0.04 mg/kg bw/day (SF 100, oral absorption 40%).</p> <p>The agreed ADI is 0.1 mg/kg bw/day (SF 100).</p>

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the Evaluation Meeting
		<p>the 1-year oral toxicity study in dogs. However, the effects at the LOAEL of 30 mg/kg bw/day were very slight. The NOAEL for females was 30 mg/kg bw. As for male dogs, there were minimal effects on cholesterol levels and liver weights (caused by only one male dog out of 4 dogs), but no histopathological changes in the liver were observed at the LOAEL of 30 mg/kg bw/day. Therefore, it can be assumed that the real NOAEL in this study is just slightly lower than 30 mg/kg bw/day.</p>		
	<p>Open point 2.13 RMS to revise the list of end points also taking into consideration the discussion at the meeting of experts. See reporting table 2(30)</p>		<p>December 2008: The list of endpoints has been revised based on the comments in the reporting table and based on the addendum (December 2008). If necessary, the list of endpoints will again be revised after the expert meeting.</p>	<p><u>PRAPeR 64 (19 -23 01.2009):</u> Open point fulfilled.</p>
	<p>Open point 2.14 Dermal absorption values to be confirmed by the experts. See reporting table 2(31)</p>	<p>Notifier: Agrees with the values proposed in the DAR, 2.5% for the concentrate and 13% for the spray strength.</p>	<p>December 2008: To be discussed in the expert meeting. RMS still proposes 2.5% for the concentrate and 13% for the spray dilution, based on <i>in vitro</i> dermal absorption data with human skin.</p>	<p><u>PRAPeR 64 (19 -23 01.2009):</u> Open point fulfilled. The agreed dermal absorption values were 2.5% for the concentrate and 13% for the dilution</p>
	<p>Open point 2.15 RMS to provide revised exposure calculations (with final results in % of AOEL) after agreement of the AOEL.</p>		<p>December 2008: To facilitate the discussion, the RMS already presented the exposure calculations in the addendum (December 2008), with final results in</p>	<p><u>PRAPeR 64 (19 -23 01.2009):</u> Open point fulfilled.</p>

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the Evaluation Meeting
	See reporting table 2(32)		% of AOEL, using the AOEL proposed in the DAR (0.04 mg/kg bw/day). In case the AOEL changes during the expert meeting, the risk assessment can easily be amended.	
	Open point 2.16 Bystander exposure to be confirmed by the experts (with regard to the parameters used in the calculations). See reporting table 2(33)		December 2008: See open point 2.15 and the addendum (December 2008). The calculations for the bystander are now presented in a new transparent spreadsheet, and in the addendum (December 2008) a body weight of 60 kg is assumed for the bystander.	<u>PRAPeR 64 (19 -23 01.2009):</u> Open point fulfilled.
	Open point 2.17 Detailed calculations of operator exposure with the Dutch greenhouse model to be provided in an addendum (December 2008). See reporting table 2(34)		December 2008: See open point 2.15 and the addendum (December 2008). The calculations for the operator with the Dutch greenhouse model are now presented in a new transparent spreadsheet.	<u>PRAPeR 64 (19 -23 01.2009):</u> Open point fulfilled. New open point proposed, see below.
	New open point 2.22: RMS to provide new operator exposure estimates with the Dutch model for the indoor use (without the use of RPE) in a revised addendum.			<u>PRAPeR 64 (19 -23 01.2009):</u> Open point open.
	Open point 2.18 Worker exposure to be discussed by the experts with		December 2008: See open point 2.15 and the addendum (December 2008). The	<u>PRAPeR 64 (19 -23 01.2009):</u> Open point fulfilled.

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	<p>regard to the used model and parameters, and additional calculations with Europoem II to be provided in an addendum (December 2008).</p> <p>See reporting table 2(37)</p>		<p>calculations for the worker are now presented in a new transparent spreadsheet. EUROPOEM II was used for the calculations.</p>	
	<p>Open point 2.19 Experts to discuss whether the level of toluene (relevant impurity) in the final technical specification is covered by its level in the toxicological batches.</p> <p>See reporting table 2(40)</p>	<p>Notifier: The test material used in the toxicology studies is representative of the technical specification supported for Annex I inclusion</p>	<p>December 2008: To be discussed in the expert meeting.</p>	<p><u>PRAPeR 64 (19 -23 01.2009):</u></p> <p>Open point fulfilled.</p> <p>Toluene is a toxicological relevant impurity but not of concern at the proposed level in the T.S (0.5%).</p>
	<p>Open point 2.20 Experts to discuss the relative toxicity of the plant metabolite PYPA ((RS)-2-(2-pyridyloxy)propyl alcohol) in comparison with pyriproxyfen, taking into account that it is proposed as intermediate in the rat metabolic pathway but has not been identified in the rat metabolism studies.</p> <p>The notifier has provided a position in his comments on the reporting table.</p>	<p>Notifier: The response provided previously still applies. Although the metabolite was not found in rat, it would be formed from metabolism of the ether bond and is an intermediate in the biotransformation of pyriproxyfen. The toxicology of PYPA is taken into account in the toxicological profile of pyriproxyfen</p>	<p>December 2008: See the addendum (December 2008) for more information. To be discussed in the expert meeting.</p>	<p><u>PRAPeR 64 (19 -23 01.2009):</u></p> <p>Open point fulfilled.</p> <p>PYPA is most probably an intermediate in the rat metabolism, and is therefore covered by the reference values of the parent.</p>

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	See reporting table 2(41)			
	<p>Open point 2.21 As pyriproxyfen is produced as a racemic mixture of enantiomers (R/S), can the adverse effects observed during the toxicological studies be attributed specifically to one of the isomers ? This is to be discussed by the experts.</p> <p>See reporting table 2(42)</p>	<p>Notifier. The mixture of enantiomers in the test material used in the toxicology studies is the same as that in the technical material supported for Annex I inclusion</p>	<p>December 2008: To be discussed in the expert meeting.</p>	<p><u>PRAPeR 64 (19 -23 01.2009):</u></p> <p>Open point fulfilled.</p> <p>No information is available on the relative toxicity of the individual isomer</p>

REPORT OF PRAPeR EXPERT MEETING 65

PYRIPROXYFEN

Rapporteur Member State: NL

Specific comments on the active substance in the section

3. Residues

are already listed in the relevant reporting table. Comments submitted for this meeting are listed below.

1. Comments submitted for this meeting:

Date	Supplier	File Name
none		

2. Documents submitted for meeting:

Date	Supplier	File Name
December 2008	NL	Pyriproxyfen addendum Vol 3_B7 (December 2008).doc
December 2008	NL	Pyriproxyfen addendum Vol 4 (December 2008) cover page.doc
December 2008	NL	Pyriproxyfen evaluation table rev 0-1 (December 2008) residues.doc
December 2008	NL	Pyriproxyfen list of endpoints (December 2008) residues.doc
2008-01-04	NL	Pyriproxyfen reporting table rev1-2 (2008-01-04).doc
December 2008	NL	Pyriproxyfen_list of protected studies_(December 2008) residues.doc

3. Documents tabled at the meeting:

Date	Supplier	File Name
none		

The conclusions of the meeting were as follows:

- Data on preparations:** PYRIPROXYFEN 10 EC
- Classification and labelling:** Not relevant.
- Recommended restrictions/conditions for use:** None
- Reference List:** Not discussed.

Areas of concern: None.

Appendix 1: Discussion table: PYRIPROXYFEN

Appendix 2: Evaluation table

Appendix 1: Discussion Table, Pyriproxyfen (In)

3. Residues

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>Open point 3.1 The RMS assessment: 'The metabolite was not found in rat, but should be the only logic product of hydrolysis of the ether bond of pyriproxyfen. Its toxicology is taken into account in the toxicological profile of pyriproxyfen.' should be confirmed by the meeting of toxicology, in order to agree that the proposed relevant residue in food and feed items is pyriproxyfen only. see also comment 3(14)</p> <p>A revision of the respective paragraph with regard to the length of the PHI should be done in a revised DAR/ corrigendum as appropriate.</p>	<p>Metabolism was investigated in tomato, apple and cotton covering fruit and oilseeds. The DOR for monitoring and the RA is proposed as the parent compound alone.</p> <p>There was a concern on the tox relevance of the metabolite PYPA because this metabolite was not recovered in the rat metabolism.</p> <p>The meeting on toxicology agreed that PYPA, based on the assumed metabolic pathway, is likely to be an intermediate in the rat as well (it occurs in the goat and in the hen) and that it is covered by the toxicological reference values of pyriproxyfen.</p> <p>After discussion with the tox meeting, this metabolite should not be an issue for the plant residue definition because of the low level of the recovered PYPA (below 10 % of the TRR) in crops.</p>	<p>Open point fulfilled.</p> <p>The meeting on toxicology has agreed that PYPA is likely to be an intermediate in the rat metabolism and that it is covered by the toxicological reference values of pyriproxyfen. It is not necessary to include PYPA in the plant residue definition as a relevant metabolite.</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	See reporting table 3(2)		
	<p>Open point 3.2 Considerations on potential livestock exposure through cotton gin trash and resulting residues in food of animal origin to be transferred in an addendum to the DAR</p> <p>See reporting table 3(18)</p>	<p>In the Addendum of Dec 2008 the livestock intake calculation was performed using the OECD feedingstuffs guideline. So, the meeting discussed whether cotton gin trash can be considered as a feed item. This item is only used in the US and Canada in beef cattle diet. This item can be considered as a minor feed item within EU.</p> <p>The worst dietary intake for beef cattle is a 200 fold lower than the dose of ingestion used in the ruminant metabolism study. No residues above 0.01 mg/kg are expected in animal matrices considering the 1 X dose.</p>	<p>Open point fulfilled.</p> <p>Addendum of Dec 2008 was discussed by the meeting.</p>
	<p>Open point 3.3 RMS proposal: To be discussed in an expert meeting whether gin trash should be dealt with as a feed item</p> <p>See reporting table 3(18)</p>	See discussion in OP 3.2.	<p>Open point fulfilled.</p> <p>Cotton gin trash can be considered as a minor feed item within EU.</p>
	<p>Open point 3.4 With view on the higher persistency of metabolite 4-OH-PYR to be discussed by experts whether the succeeding crops issue (in particular the potential for accumulation in crops</p>	<p>The meeting had a concern that the metabolite might occur at longer time intervals because of the higher persistency in soil of this metabolite compared to the parent (mean DT 90 metabolite: 126 days; mean DT90 parent: 34 days).</p> <p>The soil dissipation study demonstrated that the highest concentration of this metabolite occurred 2 weeks after application in the soil.</p> <p>In the rotational crop study, the metabolite was not recovered in the rotated crops at the 30 days plant back interval.</p> <p>The meeting considered that no further data should be required because this metabolite was not recovered in the rotated crops at the shortest plant back interval (30 days) where the highest concentration of this metabolite is expected in soil according to the soil</p>	<p>Open point fulfilled.</p> <p>The meeting of experts considered that no further data in succeeding crops should be required.</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	<p>at higher DAT) is sufficiently addressed by the available data.</p> <p>See reporting table 3(19)</p>	<p>dissipation study.</p> <p>Therefore it is considered unlikely that residues of this metabolite would be present in crops at longer plant back intervals.</p> <p>Based on the results of the rotational crop study, it could be concluded that all the metabolites were present at a level below 0.01 mg/kg.</p>	
	<p>Open point 3.5 To be agreed by MSs that the number of available residue trials in cotton is sufficient for risk assessment purposes (and to establish a reliable MRL proposal)</p> <p>See reporting table 3(23)</p>	<p>Only 2 residue trials on cotton performed in one growing season (residues below 0.01 mg/kg). RMS considered that no residues would be expected in the seeds. It was however noted that pyriproxyfen is a fat soluble compound and that occasional findings of residues in seeds have to be excluded.</p> <p>In the table on use pattern, the gap on cotton seeds did mention the growth stage “before boll opening” which corresponds to “before BBCH 80”. The residue trials were performed at the growth stage corresponding to BBCH 78-79. Therefore there shouldn't be direct contact of pyriproxyfen with the seeds. Metabolism data (2N study) show that penetration of residues in the bolls is not significant and that residues of pyriproxyfen in seeds were <0.01 mg/kg.</p> <p>Altogether, the meeting agreed that the ‘no residue situation’ in seeds (<0.01 mg/kg) was sufficiently demonstrated and that no further trials in cotton seed are necessary. However, the meeting noted that although in food items no residues occurred, residues might occur in the feed items, triggering further residue trials for livestock dietary risk assessment purposes (and in future MRL setting for feed items).</p>	<p>Open point fulfilled.</p> <p>The meeting agreed that no further residue trials in cotton seed are necessary.</p>
	<p>Open point 3.6 In view of the consumer risk assessment, MS to consider if data are sufficient to conclude whether the ratio of enantiomers may change due to preferential metabolism and/or degradation in the relevant matrices for the residues section</p>	<p>The notifier did not provide any new data. Based on the literature data, one isomer is more biologically active than the other. No information is available on the potential toxicity of the individual isomers. Neither was there information on the ratio of the individual isomers in the residues on the crops. Some questions were raised during the meeting: Is there an enantio-specific analytical method in order to determine the isomeric ratio of pyriproxyfen present as a residue in the plant matrices?</p> <p>No clarification was brought to address this open point.</p> <p>However, the meeting agreed that under the specific conditions of use as assessed in the DAR there should be no concern for consumers even if the residues consisted of a different isomeric ratio than that addressed by the toxicological data, since the margin of safety is considered sufficiently big given the intakes of less than 1 % of the ADI and ARfD, respectively.</p> <p>(Post meeting note: The meeting of toxicology has informed that an ARfD was considered not necessary based on the low toxicity profile of pyriproxyfen.)</p>	<p>Open point fulfilled.</p> <p>Data are not sufficient to conclude on the ratio of enantiomers in crops. However, it was agreed that for the notified uses there should be no concern since the margin of safety was considered sufficiently big given consumer exposure is less than 1 % of the ADI.</p> <p>If in future dietary exposure increases due to other uses, this issue should be reconsidered.</p>

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	See reporting table 3(24)	<p>In the future, when further uses will be considered and the dietary exposure will be increased, this issue should be reconsidered.</p> <p>General comment: This point is not clearly stated in the guidelines. The meeting proposed to EFSA to write a procedure on how to deal with that issue in order to address the consumer exposure assessment.</p>	
	<p>New open point 3.7:</p> <p>RMS to amend the list of end points according to the discussions during the PRAPeR 65 meeting.</p>	The LoEPs to be amended according to the agreements of the meeting.	Open point open.

Appendix 2: Evaluation table

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the Evaluation Meeting
	Section 3 Open points: 6 Points for clarification: 0 Data gaps: 0			Section 3 Open points: 1 Points for clarification: 0 Data gaps: 0
	<p>Open point 3.1 The RMS assessment: 'The metabolite was not found in rat, but should be the only logic product of hydrolysis of the ether bond of pyriproxyfen. It's toxicology is taken into account in the toxicological profile of pyriproxyfen.' should be confirmed by the meeting of toxicology, in order to agree that the proposed relevant residue in food and feed items is pyriproxifen only. see also comment 3(14)</p> <p>A revision of the respective paragraph with regard to the length of the PHI should be done in a revised DAR/ corrigendum as appropriate.</p>	<p>Notifer: Agree with the RMS position on this point and note that the DOR is accepted as pyriproxyfen only in reporting table 3(14).</p>	<p>December 2008: To await conclusion of PRAPeR 64 (toxicology).</p>	<p><u>PRAPeR 65 (19 -23 01.2009):</u></p> <p>Open point fulfilled. The meeting on toxicology has agreed that PYPA is likely to be an intermediate in the rat metabolism and that it is covered by the toxicological reference values of pyriproxyfen. It is not necessary to include PYPA in the plant residue definition as a relevant metabolite.</p>

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the Evaluation Meeting
	See reporting table 3(2)			
	<p>Open point 3.2 Considerations on potential livestock exposure through cotton gin trash and resulting residues in food of animal origin to be transferred in an addendum to the DAR</p> <p>See reporting table 3(18)</p>		<p>December 2008: Potential livestock exposure was calculated using the OECD feeding table for Europe and the Lundehn feeding table. It was found that the trigger value for performing livestock feeding studies was not exceeded. Comparison of exposure of livestock with the feeding level used in the metabolism studies showed that no residues have to be expected. See addendum to the DAR (December 2008).</p>	<p><u>PRAPeR 65 (19 -23 01.2009):</u></p> <p>Open point fulfilled.</p> <p>Addendum of Dec 2008 was discussed by the meeting.</p>
	<p>Open point 3.3 RMS proposal: To be discussed in an expert meeting whether gin trash should be dealt with as a feed item</p> <p>See reporting table 3(18)</p>		<p>December 2008: Cotton will be grown in Bulgaria, Spain and Greece. Livestock can potentially be exposed to cotton seed(products) or gin trash. It was calculated using the OECD and Lundehn feeding tables that residues have not to be expected. See addendum to the DAR (December 2008).</p>	<p><u>PRAPeR 65 (19 -23 01.2009):</u></p> <p>Open point fulfilled.</p> <p>Cotton gin trash can be considered as a minor feed item within EU.</p>
	<p>Open point 3.4 With view on the higher persistency of metabolite 4-OH-PYR to be discussed by experts whether the</p>	<p>Notifier: The confined rotational crop study of pyriproxyfen is conducted at the application rate of 80 g a.i./acre (197.7 g a.i./ha). The concentration of radioactivity in the treated soil is</p>	<p>December 2008: Measuring 4-OH-PYR in rotational crops planted 30DAT showed that no residues of 4-OH-PYR exceed 0.01 mg/kg.</p>	<p><u>PRAPeR 65 (19 -23 01.2009):</u></p> <p>Open point fulfilled.</p> <p>The meeting of experts considered that no</p>

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the Evaluation Meeting
	<p>succeeding crops issue (in particular the potential for accumulation in crops at higher DAT) is sufficiently addressed by the available data.</p> <p>See reporting table 3(19)</p>	<p>calculated to be 12 ppm (equiv. to pyriproxyfen) considering the application rate and method used for this study. The aerobic soil metabolism study shows that 4'-OH-Pyr is formed at 0.9-6.3 % AR (Applied Radioactivity) in soil 1 to 30 days after treatment. Therefore, succeeding crops in the confined rotational crop study are exposed not only to pyriproxyfen but also to 4'-OH-Pyr at a level of at least 0.108 ppm, assuming that 0.9 %AR of pyriproxyfen is transformed during the 30-day plant back period. The concentration of 0.108 ppm corresponds to ten times greater than the value calculated as the maximum plateau concentration, 0.013 ppm (SE), reached one year after application at the tomato GAP. As a result, no conspicuous residue including 4'-OH-Pyr was detected from the quantitative and qualitative aspects in the confined succeeding crops.</p> <p>In the U.S. field dissipation study, no persistency of 4'-OH-Pyr. 4'-OH-Pyr was found (<0.01 mg/kg) at any time 10 days after the last application and no carryover was found immediately after multiple applications with a 14-day interval, except for one of three</p>	<p>Since it was calculated that at higher DAT the level of 4-OH-PYR is lower than the level measured in the rotational crop study performed at 30DAT, no residues of 4-OH-PYR should occur in rotational crops at higher DAT.</p> <p>See addendum to the DAR (December 2008). Overall, it can be concluded that 4-OH-PYR levels in soil are lower in the field than calculated based on lab DT50 values. No residues of 4-OH-PYR have to be expected in rotational crops since.</p>	<p>further data in succeeding crops should be required.</p>

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		<p>sites. At this site, 4'-OH-Pyr was detected at a maximum of 0.02 mg/kg during Day 0 to 7 after the last application and the residue at Day 30 was only 0.003 mg/kg. These results indicates that DT50 of 4'-OH-Pyr should be less than 10 days in the actual field and this is clearly faster than the calculated DT50 of 24 to 70 days (mean 38 days) from the laboratory studies which were conducted under the worst case situation. Although the storage stability study showed that 20-40% of the residue of 4'-OH-Pyr in soil might be degraded during the storage in the field dissipation study, the rate of dissipation of 4'-OH-Pyr in the field could not be affected by the stability. Even taking the degradation into consideration, the maximum formation of 4'-OH-Pyr in the field would be estimated at double of 0.02 mg/kg, namely 0.04 mg/kg.</p> <p>Considering the above comprehensively, the possibility of uptake of 4'-OH-Pyr to succeeding crops is unlikely and at insignificant levels, even if it occurs.</p>		

No.	<u>Column A</u> Conclusions of the EFSA Evaluation Meeting	Column B Comments from the main data submitter / applicant on the EFSA Evaluation Meeting conclusion	<u>Column C</u> Rapporteur Member State comments on main data submitter / applicant comments	<u>Column D</u> Recommendations EPCO Expert Meeting / Conclusions of the Evaluation Meeting
	<p>Open point 3.5 To be agreed by MSs that the number of available residue trials in cotton is sufficient for risk assessment purposes (and to establish a reliable MRL proposal)</p> <p>See reporting table 3(23)</p>	<p>Notifier: Agree with the RMS that 2 residue trials should be sufficient to demonstrate a no residue situation based on the data generated to date.</p>	<p>December 2008: Two residue trials in which pyriproxyfen was applied before boll opening, together with the results of the metabolism study performed at 2N, show that no residues have to be expected in cotton seed. See addendum to the DAR (December 2008).</p>	<p><u>PRAPeR 65 (19 -23 01.2009):</u></p> <p>Open point fulfilled.</p> <p>The meeting agreed that no further residue trials in cotton seed are necessary.</p>
	<p>Open point 3.6 In view of the consumer risk assessment, MS to consider if data are sufficient to conclude whether the ratio of enantiomers may change due to preferential metabolism and/or degradation in the relevant matrices for the residues section</p> <p>See reporting table 3(24)</p>	<p>Notifier: See data gap response for reporting table 1(6)</p>	<p>December 2008: See addendum to the DAR (December 2008). No relevant information on metabolism plant was provided. Open point 2(21) on the toxicology of both metabolites was waived since all toxicological studies were performed with the racemic mixture as well. However, whether the (R) and (S) isomer show different metabolic patterns <i>in vivo</i> was not shown. A bridging study were both isomers are applied separately to plant is proposed. <i>New data gap</i></p>	<p><u>PRAPeR 65 (19 -23 01.2009):</u></p> <p>Open point fulfilled.</p> <p>Data are not sufficient to conclude on the ratio of enantiomers in crops. However, it was agreed that for the notified uses there should be no concern since the margin of safety was considered sufficiently big given consumer exposure is less than 1 % of the ADI.</p> <p>If in future dietary exposure increases due to other uses, this issue should be reconsidered.</p>
	<p>New open point 3.7: RMS to amend the list of end</p>			<p><u>PRAPeR 65 (19 -23 01.2009):</u></p> <p>Open point open.</p>

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	points according to the discussions during the PRAPeR 65 meeting.			