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REPORT OF PRAPeR EXPERT MEETING 66

HEPTAMALOXYLOGLUCAN

Rapporteur Member State: FR

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
May 2007	FR	Heptamaloxyloglucan list of data relied on (May 2007) ver1.doc
January 2009	FR	Heptamaloxyloglucan_DAR_Vol1_corrigendum 1 (January 2009).doc
January 2009	FR	Heptamaloxyloglucan_DAR_Vol3_B2_addendum 1 (January 2009).doc
January 2009	FR	Heptamaloxyloglucan_DAR_Vol3_B2_corrigendum 1 (January 2009).doc
2009-04-07	FR	Heptamaloxyloglucan_evaluation table rev1-0 (2009-04-07).doc
2009-02-11	FR	Heptamaloxyloglucan_reporting table rev 1-1 (2009-02-11).doc
January 2009	FR	Heptamaloxyloglucan_updated ist of endpoints (January 2009)_fis-chem.doc

3. Documents tabled at the meeting:

Date	Supplier	File Name
none		

The conclusions of the meeting were as follows:

4. **Data on preparations:** PEL 101 GV

5. **Classification and labelling:** Not discussed

6. **Recommended restrictions/conditions for use:** None

7. **Reference list:** Not discussed

Areas of concern: none

Appendix 1: Discussion table: HEPTAMALOXYLOGLUCAN

Appendix 2: Evaluation table

Appendix 1: Discussion Table, Heptamaloxyloglucan

1. Physical and Chemical Properties

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	Open point: 1.1 The issue of mycotoxin contamination should be considered by a meeting of experts. See reporting table 1(2)	The issue of mycotoxin contamination was discussed as well as the explanation provided that beside trace residues of Patulin no other significant mycotoxins are detected in the active ingredient. The meeting agreed that Patulin should be considered as the marker mycotoxin. Message for tox: Patulin may be present in the technical active ingredient. Please advise on the maximum level of Patulin which can be considered as safe.	Open point fulfilled. Message sent to section 2 (tox). New open point proposed, see below.
	New open point 1.7 RMS to summarize the results of batches analysed for Patulin in an Addendum.		Open point open.
	Open point: 1.2 The meeting of experts should consider the specification, in particular the 20 % of the TGAI that has not been identified. See reporting table 1(3)	The 20 % of unidentified material was discussed and the meeting agreed that no further information on the identity of the impurities is required and the explanation (production process, selectivity of the analytical method) of the notifier is accepted.	Open point fulfilled.
	Open point: 1.3 The common name of the active substance should be inserted	The common name of the active substance has not yet been inserted in the title to the table of representative uses. The point remains open.	Open point open.

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	between the brackets in the title to the table of representative uses. See reporting table 1(6)		
	Open point: 1.4 Temperature of decomposition purity should read >99% in the LoEP. See reporting table 1(10)	The temperature of decomposition purity should read >99% in the LoEP. The point remains open, RMS to amend the list of end point accordingly.	Open point open.
	Open point: 1.5 What type of opening is “crimped hermetically”? Please provide more detail. What material is used to seal the opening? See reporting table 1(29)	More information and explanation were provided on the type and material of the opening. These were found satisfactory by the meeting.	Open point fulfilled.
	Open point: 1.6 Meeting of experts should consider the new study on shelf-life. See the addendum 1 (Vol3 Annex B.2). See reporting table 1(30)	The 2-year shelf-life study was discussed and the meeting agreed that the shelf-life is at least 2 years.	Open point fulfilled.

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	New open point 1.8 RMS to update the list of end points according to PRAPeR 66.	Identity of relevant impurities: Patulin max level open. CAS should be deleted in the box for CAS Number. The function should be changed to “elicitor” GAP table: Type of formulation should be checked, as the active is highly soluble in water Method of analysis: commonly available method based on HPLC-UV EN14177-2003 can be used for determination of Patulin in apple products. The name of the active substance should be given in the title of the table of representative uses. Surface tension: concentration tested should be given. Bracket missing in box “explosive properties”.	Open point open.
	New open point 1.9 RMS to amend the list of studies relied on with EN method for Patulin.		Open point open.
	Message to section 2 (mammalian toxicology): Patulin may be present in the technical active ingredient. Please advise on the maximum level of Patulin which can be considered as safe.		

Appendix 2: Evaluation table

1. Identity, Physical and chemical properties, Details of uses and further information, Methods of analysis

No.	Column A Conclusions from the Reporting Table	Column B Comments from the notifier / applicant	Column C Rapporteur Member State comments on the notifier / applicant comments	Column D Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	Section 1 Open points: ***6*** Points for clarification: ***0*** Data requirements: ***0***			Section 1 Open points: ***5*** Points for clarification: ***0*** Data requirements: ***0***
	Open point: 1.1 The issue of mycotoxin contamination should be considered by a meeting of experts. See reporting table 1(2)	We agree with the RMS evaluation considering stable the apple-derived raw material with regard to the development of fungi responsible for the mycotoxin production (Aw>0.5) and also considering that molecules of MW lower than 250 g/mol are driven out during the 4th step of the manufacturing process (i.e. nanofiltration) Analysis of Patulin carried out on the technical active substance EL101GV and submitted in the dossier (referred as document J and as annex K II 01 08 01 in the Heptamaloxyloglucan submission dossier following annex 1, directive 91/414/EEC, acknowledged by all EC member states and by EFSA the 2nd of July, 2007:" Method of manufacturing of EL101GV") did not show any Patulin occurrence. Alternariol and alternariol monomethyl ether mycotoxins are potentially	**RMS (April 09):** RMS agrees with notifier. Open point fulfilled.	PRAPeR 66 (21 – 24 April 2009): Open point fulfilled. Message sent to section 2 (tox). New open point proposed, see below.

No.	Column A Conclusions from the Reporting Table	Column B Comments from the notifier / applicant	Column C Rapporteur Member State comments on the notifier / applicant comments	Column D Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
		occurring in apple products at very low levels and are not followed up at a regulation level or a peculiar official guideline. A study from the UK food agency only showed 2 samples of alternariol contamination higher than their quantification analysis limit of 3 µg/kg (6.2 and 4.3 µg/kg) among a pool of 300 apple derived product samples (apple juice and so on). Reference of the study: Food Standard Agency – 20 March 2003 – "low levels of mycotoxins in apple juice and apple products" http://www.food.gov.uk/news/newsarchive/2003/mar/apples .		
	New open point 1.7 RMS to summarize the results of batches analysed for Patulin in an Addendum.			PRAPeR 66 (21 – 24 April 2009): Open point open.
	Open point: 1.2 The meeting of experts should consider the specification, in particular the 20 % of the TGAI that has not been identified. See reporting table 1(3)	We do confirm the technical active substance is a 100% xyloglucan oligosaccharides composition and that the 20% impurities left along with the main product "Heptamaloxyloglucan" are other xyloglucan oligosaccharidic structures, resulting from the enzymatic hydrolysis process (referred as document J and as annex K II 01 10 01 in the Heptamaloxyloglucan submission dossier following annex 1, directive 91/414/EEC, acknowledged by all EC member states and by EFSA	**RMS (April 09):** RMS agrees with notifier. Open point fulfilled.	PRAPeR 66 (21 – 24 April 2009): Open point fulfilled.

No.	Column A Conclusions from the Reporting Table	Column B Comments from the notifier / applicant	Column C Rapporteur Member State comments on the notifier / applicant comments	Column D Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
		the 2nd of July,2007:"impurity characterization EL101GV technical active substance")		
	Open point: 1.3 The common name of the active substance should be inserted between the brackets in the title to the table of representative uses. See reporting table 1(6)	The common name *i.e.* "Heptamaloxyloglucan" has been officially proposed to the ISO office on 10/03/2009.	**RMS (April 09):** RMS agrees with notifier. Open point fulfilled.	PRAPeR 66 (21 – 24 April 2009): Open point open.
	Open point: 1.4 Temperature of decomposition purity should read >99% in the LoEP. See reporting table 1(10)	We do agree with **a > 99%** purity of active substance used in the Heptamaloxyloglucan temperature decomposition study.	**RMS (April 09):** RMS agrees with notifier. Open point fulfilled.	PRAPeR 66 (21 – 24 April 2009): Open point open. RMS to amend the list of endpoint accordingly.
	Open point: 1.5 What type of opening is "crimped hermetically"? Please provide more detail. What material is used to seal the opening? See reporting table 1(29)	The 20 ml volume flask (from Wheaton ref. N°223762) made in a borosilicate glass is sealed thanks to a crimping tool (from Wheaton ref. 224323). The tap is a plastic one (chlorobutyl, color grey, Wheaton ref. N°224100-194) that perfectly fits the flask opening. It is surrounded with an aluminium capsule (from Wheaton ref.224193-01) set up thanks to the previously described crimping tool. 	**RMS (April 09):** These explanations are considered acceptable. Open point fulfilled.	PRAPeR 66 (21 – 24 April 2009): Open point fulfilled.

No.	Column A Conclusions from the Reporting Table	Column B Comments from the notifier / applicant	Column C Rapporteur Member State comments on the notifier / applicant comments	Column D Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	Open point: 1.6 Meeting of experts should consider the new study on shelf-life. See the addendum 1 (vol3 Annex B2). See reporting table 1(30)	The 2-year shelf-life study that has just been deposited to the dossier highlights stability of the reference preparation. The whole dossier is communicated to the EFSA and to all the EC member states.	**RMS (April 09):** The 2-year shelf life study is considered acceptable. Open point fulfilled.	PRAPeR 66 (21 – 24 April 2009): Open point fulfilled.
	New open point 1.8 RMS to update the list of end points according to PRAPeR 66. (refer to Discussion table)			PRAPeR 66 (21 – 24 April 2009): Open point open.
	New open point 1.9 RMS to amend the list of studies relied on with EN method for Patulin.			PRAPeR 66 (21 – 24 April 2009): Open point open.
	Message to section 2 (mammalian toxicology): Patulin may be present in the technical active ingredient. Please advise on the maximum level of Patulin which can be considered as safe.			

REPORT OF PRAPeR EXPERT MEETING 67

HEPTAMALOXYLOGLUCAN

Rapporteur Member State: FR

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
May 2007	FR	Heptamaloxyloglucan list of data relied on (May 2007) ver1.doc
January 2009	FR	Heptamaloxyloglucan_DAR_Vol1_corrigendum 1 (January 2009).doc
January 2009	FR	Heptamaloxyloglucan_DAR_Vol3_B8_corrigendum 1 (January 2009).doc
2009-04-07	FR	Heptamaloxyloglucan_evaluation table rev1-0 (2009-04-07).doc
2009-02-11	FR	Heptamaloxyloglucan_reporting table rev 1-1 (2009-02-11).doc
Januray 2009	FR	Heptamaloxyloglucan_updated list of endpoints (January 2009)_fate_ecotox.doc

3. Documents tabled at the meeting:

Date	Supplier	File Name
None		

The conclusions of the meeting were as follows:

4. Data on preparations: PEL101GV

5. Classification and labelling: None

6. Recommended restrictions/conditions for use: None identified

7. Reference list: Not discussed

Areas of concern: none

Appendix 1: Discussion table: HEPTAMALOXYLOGLUCAN

Appendix 2: Evaluation table

Appendix 1: Discussion Table, Heptamaloxyloglucan

4. Fate and behaviour

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	Open point: 4.1 RMS to consider if they might wish to provide any argumentation why a Koc of 20 L/kg might be appropriate for use in a leaching assessment. See reporting table 4(1)	The RMS chose not to provide any argumentation regarding the Koc value. Open point closed.	Open point fulfilled.
	Open point: 4.2 Member state experts to discuss and conclude if the results of the available ready biodegradability study on heptamaloxyloglucan can be used to estimate a credible soil degradation rate for use in a leaching estimate. See reporting table 4(1)	The microbial activity in sewage sludge and the optimal conditions in the ready biodegradability study are very different from the conditions expected in soil. Qualitatively, the result from the biodegradability can be used to state that the compound will also be readily biodegradable in soil, which is supported by the literature information available in the dossier. However, the experts did not feel comfortable deriving a half-life value from this study for use in a quantitative assessment. Open point fulfilled.	Open point fulfilled.

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	Open point: 4.3 Member state experts to discuss and conclude if the case made by the applicant regarding the potential for groundwater contamination as reported in the DAR on page 205 to Vol. 3 is sufficient to conclude groundwater contamination >0.1 µg/L is unlikely. See reporting table 4(1)	With very extreme input parameters, PELMO and PEARL runs were made during the meeting (4 applications per year, 50 % canopy interception, 4 days interval, DT50 1000 days, Koc 0 L/kg) leading to the following results at the applied for application rate: Range of FOCUS scenarios PECgroundwater is 0.1 – 0.26 µg/L (80-th percentile annual average concentrations). Assuming even minimal degradation and retention in soil, it is expected that the concentrations will be well < 0.1 µg/L with the knowledge that the substance is readily biodegradable as shown in the dossier. Overall, the experts do not expect that there is a risk of leaching concentrations > 0.1 µg/L. Open point fulfilled.	Open point fulfilled.
	Open point: 4.4 Member state competent authorities to consider if they would wish to request their risk managers to consult legal advice, so they will be able to provide a view to the working group legislation whether the drinking water limit of 0.1 µg/L would or would not apply to heptamaloxyloglucan (the active substance)?	This open point is not for discussion by the PRAPeR 67 meeting of fate and behaviour experts and was not discussed.	Open point remains open. Member state competent authorities to consider if they would wish to request their risk managers to consult legal advice, so they will be able to provide a view to the working group legislation whether the drinking water limit of 0.1 µg/L would or would not apply to heptamaloxyloglucan (the active substance)? Note: EFSA understands that whether 0.1 µg/L applies has nothing to do with whether an MRL or ADI is defined, i.e. if their might be any risk.

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	Note: EFSA understands that whether 0.1 µg/L applies has nothing to do with whether an MRL or ADI is defined, i.e. if there might be any risk. The only issue is whether heptamaloxyloglucan is a 'pesticide' according to the definition in Council Directive 98/83/EC. See reporting table 4(2)		The only issue is whether heptamaloxyloglucan is a 'pesticide' according to the definition in council directive 98/83/EC.
	Open point: 4.5 EFSA to refer to the more conservative FOCUSsw and sed step 1 calculations included in corrigendum 1 to the DAR (January 2009) in its conclusion. See reporting table 4(3)	The input parameters used in the corrigendum 1 to the DAR (January 2009) were considered conservative estimates by the meeting of experts. This open point is not for discussion by the PRAPeR 67 meeting of fate and behaviour experts and was not discussed further than the confirmation that the input parameters were conservative.	Open point open. EFSA to refer to the more conservative FOCUSsw and sed step 1 calculations included in corrigendum 1 to the DAR (January 2009) in its conclusion.
	New open point 4.6 RMS to amend the residue definition for further assessment.	Residue definition: parent heptamaloxyglucan for all compartments	Open point open.

Appendix 2: Evaluation table

4. Environmental fate and behaviour

No.	Column A Conclusions from the Reporting Table	Column B Comments from the notifier / applicant	Column C Rapporteur Member State comments on the notifier / applicant comments	Column D Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	Section 4 Open points: ***5*** Points for clarification: ***0*** Data requirements: ***0***			Section 4 Open points: ***3*** Points for clarification: ***0*** Data requirements: ***0***
	Open point: 4.1 RMS to consider if they might wish to provide any argumentation why a Koc of 20 L/kg might be appropriate for use in a leaching assessment. See reporting table 4(1)	The active substance is fully part of soil constituents and that is why it is impossible to assess any weak exogenous contribution with regard to an endogenous quantity and therefore, a Koc. Even making an unrealistic worst-case Koc with a value of Zero, and a DT_{50} of 13.3 days in PELMO3.3.2 model, gives 80th percentile estimations lower than 0,015 µg/L or in other words well below the limit fixed at 0.1 µg / L. The risk will be even lower with a more realistic Koc set at 20 L/kg as proposed by the RMS.	**RMS (April 2009):** It is agreed that the Koc value is not really sustained. This value was chosen by expert judgement as a conservative (worst case) value for risk assessment in the first version of the DAR. In the corrigendum 1 to the DAR we propose that due to the absence of MRL and ADI there is no need for a calculated PECgw and thus no need to determine a Koc. No data was reported in the LoEP. Moreover heptamaloxyloglucan is not considered to enter in the definition of residue. Heptamaloxyloglucan is a stimulator of plant defence natural mechanisms and is not toxic at all for Human and the environment. In other words, the 0.1µg/L limit is not considered to apply in this particular case.	PRAPeR 67 (20 -24 April.2009): Open point fulfilled.
	Open point: 4.2 Member state experts to discuss and conclude if the	We agree with the RMS proposal to determine DT_{50} at 13.3 days. This fixed value calculated from the results of the	**RMS (April 2009):** The use of ready biodegradability to estimate a credible soil degradation	PRAPeR 67 (20 -24 April.2009):

No.	Column A Conclusions from the Reporting Table	Column B Comments from the notifier / applicant	Column C Rapporteur Member State comments on the notifier / applicant comments	Column D Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	results of the available ready biodegradability study on heptamaloxyloglucan can be used to estimate a credible soil degradation rate for use in a leaching estimate. See reporting table 4(1)	ready biodegradability study is considered from our point of view as a worst case. Indeed, it is calculated taking into account a full mineralization of Heptamaloxyloglucan into CO_2. If we refer to the real DT_{50} (disclosed in the study: "An assessment of the ready biodegradability" undertaken by ELICITYL and presented in the Heptamaloxyloglucan submission dossier following annex 1, directive 91/414/EEC, the 2nd July 2007), DT_{50} is shorter than 40 hours including the lag phase (selection and development phases).	rate was not the purpose of the proposed soil DT50. It was used in the first version of the DAR to estimate the PEC groundwater only as indicative. This value was not part of the proposed list of endpoint. Moreover we considered that "the fate and behaviour of heptamaloxyloglucan in soil and possible assimilation and degradation by soil micro- and macro-organisms are well described" (see B.8.1.2.4. Conclusion on route and rate of degradation).	Open point fulfilled.
	Open point: 4.3 Member state experts to discuss and conclude if the case made by the applicant regarding the potential for groundwater contamination as reported in the DAR on page 205 to Vol. 3 is sufficient to conclude groundwater contamination >0.1 µg/L is unlikely. See reporting table 4(1)	Taking extremely disadvantageous parameters, a DT_{50} fixed at 13.3 days and a Koc equal to zero, there are no risks for groundwater contamination.	**RMS (April 2009):** See answer to open point 4(1)	PRAPeR 67 (20 -24 April.2009): Open point fulfilled.
	Open point: 4.4 Member state competent authorities to consider if they would wish to request their risk managers to consult	A Decision to class Heptamaloxyloglucan as a pesticide for a determination of drinking water limit fixed at 0.1 µg/L recovers from the expertises of the EC comity.	**RMS (April 2009):** As heptamoloxyloglucan acts as a stimulator of plant defence natural mechanisms, it was not considered to have detrimental "biocide" effects and	PRAPeR 67 (20 -24 April.2009): Open point open.

No.	Column A Conclusions from the Reporting Table	Column B Comments from the notifier / applicant	Column C Rapporteur Member State comments on the notifier / applicant comments	Column D Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	legal advice, so they will be able to provide a view to the working group legislation whether the drinking water limit of 0.1 µg/L would or would not apply to heptamaloxyloglucan (the active substance)? Note: EFSA understands that whether 0.1 µg/L applies has nothing to do with whether an MRL or ADI is defined, i.e. if there might be any risk. The only issue is whether heptamaloxyloglucan is a 'pesticide' according to the definition in Council Directive 98/83/EC. See reporting table 4(2)	Whether this limit fixed at 0.1 µg/L should be kept, risk modelling presented in the DAR by the RMS show that it will be esteemed.	that it was not considered to have detrimental effects in any sections of the Draft Assessment Report, the RMS considered that the limit of 0.1 µg/L is not relevant in this particular case.	
	Open point: 4.5 EFSA to refer to the more conservative FOCUSsw and sed step 1 calculations included in corrigendum 1 to the DAR (January 2009) in its conclusion. See reporting table 4(3)	We agree with the last model calculation from the RMS Focus step 1, which in extremely disadvantageous cases (Koc is zero and DT_{50} is 1000 days) give an exposure lower than 0.6 µg/L.	**RMS (April 2009):** noted, no action made by the RMS.	PRAPeR 67 (20 -24 April.2009): Open point open.
	New open point 4.6 RMS to amend the residue definition for further			PRAPeR 67 (20 -24 April.2009):

No.	Column A Conclusions from the Reporting Table	Column B Comments from the notifier / applicant	Column C Rapporteur Member State comments on the notifier / applicant comments	Column D Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	assessment in line with the conclusions of the PRAPeR 67 meeting: Residue definition: parent heptamaloxyglucan for all compartments			Open point open.

REPORT OF PRAPeR EXPERT MEETING 68

HEPTAMALOXYLOGLUCAN

Rapporteur Member State: FR

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
May 2007	FR	Heptamaloxyloglucan list of data relied on (May 2007) ver1.doc
January 2009	FR	Heptamaloxyloglucan_DAR_Vol1_corrigendum 1 (January 2009).doc
January 2009	FR	Heptamaloxyloglucan_DAR_Vol3_B9_corrigendum 1 (January 2009).doc
2009-04-07	FR	Heptamaloxyloglucan_evaluation table rev1-0 (2009-04-07).doc
2009-02-11	FR	Heptamaloxyloglucan_reporting table rev 1-1 (2009-02-11).doc
January 2009	FR	Heptamaloxyloglucan_updated list of endpoints (January 2009)_fate_ecotox.doc

3. Documents tabled at the meeting:

Date	Supplier	File Name
none		

The conclusions of the meeting were as follows:

4. Data on preparations: PEL 101 GV

5. Classification and labelling: Not discussed.

6. Recommended restrictions/conditions for use: Not discussed.

7. Reference list: Not discussed.

Areas of concern: Not discussed.

Appendix 1: Discussion table: HEPTAMALOXYLOGLUCAN

Appendix 2: Evaluation table

Appendix 1: Discussion Table, Heptamaloxyloglucan

5. Ecotoxicology

	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	There were no items to be discussed at the PRAPeR 68 meeting of experts on ecotoxicology for this substance.		

Appendix 2: Evaluation table

5. Ecotoxicology

No.	Column A Conclusions from the Reporting Table	Column B Comments from the notifier / applicant	Column C Rapporteur Member State comments on the notifier / applicant comments	Column D Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	Section 5 Open points: ***0*** Points for clarification: ***0*** Data requirements: ***0***	-	-	

Report of PRAPeR Expert MEETING 69

HEPTAMALOXYLOGLUCAN

Rapporteur Member State: FR

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
May 2007	FR	Heptamaloxyloglucan list of data relied on (May 2007) ver1.doc
January 2009	FR	Heptamaloxyloglucan_DAR_Vol1_corrigendum 1 (January 2009).doc
2009-04-07	FR	Heptamaloxyloglucan_evaluation table rev1-0 (2009-04-07).doc
May 2007	FR	Heptamaloxyloglucan_list of endpoints (May 2007)_tox_residues.doc
2009-02-11	FR	Heptamaloxyloglucan_reporting table rev 1-1 (2009-02-11).doc

3. Documents tabled at the meeting:

Date	Supplier	File Name
none		

The conclusions of the meeting were as follows:

4. **Data on preparations:** PEL 101GV

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: HEPTAMALOXYLOGLUCAN

Appendix 2: Evaluation table

Appendix 1: Discussion Table, Heptamaloxyloglucan

2. Mammalian toxicology

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	Open point: 2.1 The comparison of the current specification and the batches tested in the mammalian toxicity data package; and the potential toxicological relevance of impurities has to be confirmed by the experts. See reporting table 2(1)	As 3 out of the 6 batches (including the less pure batch ANN0304) used to establish the agreed specification were used in the toxicological tests (acute oral and percutaneous toxicity, eye and skin irritation, skin sensitization, Ames test) the experts agreed that equivalence was given. Message to PhysChem: Boric acid is produced during the production of the product – does Boric acid appear in the final technical product? This is a repro Cat2 hence concerns were raised by experts. Open point fulfilled.	Open point fulfilled. The tox batches cover the technical specification. Message sent to section 1.
	Data requirement: 2.1 Applicant to submit positive control data for the in vitro Ames assay. See reporting table 2(3)	The RMS informed the meeting that these data are available in the DAR. Data requirement closed.	Data requirement closed.
	Open point: 2.2 Data waivers on long-term toxicity and carcinogenicity studies to be confirmed at a meeting of experts. See reporting table 2(5)	The applicant argues that heptamaloxyloglucan is a naturally occurring substance including in drinks – it is extracted from apples. Two articles were submitted from the literature both performed with a tamarind seed polysaccharide which is related to heptamaloxyloglucan. These were not accepted by the RMS as it is a different test compound. The experts agreed that data waiver was acceptable based on the first point made and also on the proven low toxicity from available toxicity studies with	Open point fulfilled. Data waivers accepted.

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
		heptamaloxyloglucan. Open point fulfilled.	
	Open point: 2.3 Data waivers on reprotoxicity studies to be confirmed at a meeting of experts. See reporting table 2(6)	See discussion and outcome at open point 2.2. Open point fulfilled.	Open point fulfilled. Data waivers accepted.
	Open point: 2.4 Reference values (ADI, ARfD and AOEL) to be agreed on at a meeting of experts. See reporting table 2(9)	The experts agreed that an ADI or ARfD were not required based on the fact that heptamaloxyloglucan is a naturally occurring substance including in drinks (it is extracted from apples) and also on the proven low toxicity from available toxicity studies with heptamaloxyloglucan. The RMS proposed an AOEL based on the results from the 28-day rat study. The NOAEL from this study is 1000 mg/kg bw/d and a safety factor of 1000 was applied. The proposed AOEL is therefore 1 mg/kg bw/d. The experts agreed that based on the low toxicity and availability of heptamaloxyloglucan in food an AOEL is not required. Open point fulfilled.	Open point fulfilled. ADI, AOEL, ARfD not required.
	Open point: 2.5 Operator, worker and bystander exposure to be confirmed at a meeting of experts. See reporting table 2(10)	Experts agreed that as no reference values have been set, operator, worker and bystander exposure estimates are not required. Moreover, as the compound is of low toxicity and is a normal part of the diet, no adverse effects are anticipated. Open point fulfilled.	Open point fulfilled. Exposure estimates not required.
	Message from section 1	The maximum intake of patulin from food (TMDI) is 0.4 μg/kg bw/d (JECFA, 2000 as	Message answered.

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	(phys-chem): Patulin may be present in the technical active ingredient. Please advise on maximum level of Patulin which can be considered as safe.	confirmed by the SCF). The safe limit should be set as 50 μg/kg (fruit juices, concentrated fruit juices as reconstituted and fruit nectars) according to Commission Regulation No 1881/2006. Therefore, the maximum level of Patulin which can be considered as safe in the technical specification is 50 μg/kg.	
	Message to section 1 (Phys-chem): Boric acid is produced during the production of the product – does Boric acid appear in the final technical product? This is a repro Cat2, hence concerns were raised by experts.		Message sent to section 1.

Appendix 2: Evaluation table

2. Mammalian toxicology

<table>
<tr><th>No.</th><th>Column A
Conclusions from the Reporting Table</th><th>Column B
Comments from the notifier / applicant</th><th>Column C
Rapporteur Member State comments on the notifier / applicant comments</th><th>Column D
Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure</th></tr>
<tr><td></td><td>Section 2
Open points: 5
Points for clarification: 0
Data requirements: 1</td><td></td><td></td><td>Section 2
Open points: 0
Points for clarification: 0
Data requirements: 0</td></tr>
<tr><td></td><td>Open point: 2.1
The comparison of the current specification and the batches tested in the mammalian toxicity data package; and the potential toxicological relevance of impurities has to be confirmed by the experts.

See reporting table 2(1)</td><td>The EL101GV technical active substance proposed for the 28d rat short-term toxicity study is representative of the manufacturing process carried out in 2006 with an active substance purity very close to the average specifications determined for Heptamaloxyloglucan. The seven accompanying impurities disclosed in these specifications are all present in this batch intended for that toxicological assay. These impurities have been clearly identified as being other xyloglucan oligosaccharides.</td><td>RMS (April 09): agreed.
Furthermore the purity of the batch used for the Ames test and the skin sensitisation test was 78.2 % which is comparable to the purity grade of > 78 % determined in the 5 batches analyses, therefore it can be anticipated that all impurities were also tested.
<table>
<tr><th>Batch n°</th><th>Purity</th><th>Test</th></tr>
<tr><td rowspan="3">ALP0103</td><td rowspan="3">96.2 %</td><td>Acute oral toxicity</td></tr>
<tr><td>Acute skin irritation</td></tr>
<tr><td>Acute eye irritation</td></tr>
<tr><td>ALD0204</td><td>86.1 %</td><td>Acute percutaneous toxicity</td></tr>
<tr><td>ANN0304</td><td>78.1 %</td><td>Acute skin sensitization</td></tr>
</table></td><td>PRAPeR 69 (4 – 8 May 2009):

Open point fulfilled.

The toxicological batches cover the technical specification.

Message sent to section 1.</td></tr>
</table>

No.	Column A Conclusions from the Reporting Table	Column B Comments from the notifier / applicant	Column C Rapporteur Member State comments on the notifier / applicant comments			Column D Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
					Mutagenicity in vitro in bacterial cells (Ames's technique)	
			AND0706	87%	Short-term toxicity Oral administration 28-day, Rat	
					Mutagenicity in vitro in mammalian cell (Lymphoma)	
	Data requirement: 2.1 Applicant to submit positive control data for the in vitro Ames assay. See reporting table 2(3)	The information about the experimental data of this assay are disclosed in the report No.FSR-IPL 060207/EL101GV/ELICITY submitted to all different EC Member States and to EFSA in the Heptamaloxyloglucan submission dossier following annex 1, directive 91/414/EEC, the 2nd July 2007	**RMS (April 09):** agreed			PRAPeR 69 (4 – 8 May 2009): Data requirement closed.
	Open point: 2.2 Data waivers on long-term toxicity and carcinogenicity studies to be confirmed at a meeting of experts. See reporting table 2(5)	The following items presented in the Draft Assessment Report support demand of data waivers on long-term toxicity and carcinogenicity studies: • Heptamaloxyloglucan is naturally occurring in the organism (digestion of xyloglucan polysaccharides from plant origin) and in the daily diet (found in food industry products originating from apples , e.g. apple juice 9.44 mg/L)	**RMS (April 09):** agreed			PRAPeR 69 (4 – 8 May 2009): Open point fulfilled. Data waivers accepted.

No.	Column A Conclusions from the Reporting Table	Column B Comments from the notifier / applicant	Column C Rapporteur Member State comments on the notifier / applicant comments	Column D Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
		• The exposure brought by Heptamaloxyloglucan application as a plant protection product at 0.44 g/ha rate (exposure deemed at 1.2 mg/d on an apple juice consumption basis) is lower than the daily exposure of a consumer deemed in a worst case situation at 0.11 mg/d (calculation model presented in the Draft Assessment Report p.155 paragraph B6.10.10).		
	Open point: 2.3 Data waivers on reprotoxicity studies to be confirmed at a meeting of experts. See reporting table 2(6)	The following items presented in the Draft Assessment Report support demand of data waivers on reprotoxicity studies: • Heptamaloxyloglucan is naturally occurring in the organism (digestion of xyloglucan polysaccharides from plant origin) and in the daily diet (found in food industry products originating from apples , e.g. apple juice 9.44 mg/L) • The exposure brought by Heptamaloxyloglucan application as a plant protection product at 0.44 g/ha rate deemed in a worst-case situation at 0.11 mg/d (calculation model presented in the Draft Assessment Report p.155 paragraph B6.10.10) is lower than the daily exposure of a consumer (exposure deemed at 1.2 mg/d on an apple juice consumption basis).	**RMS (April 09):** agreed	PRAPeR 69 (4 – 8 May 2009): Open point fulfilled. Data waivers accepted.

No.	Column A Conclusions from the Reporting Table	Column B Comments from the notifier / applicant	Column C Rapporteur Member State comments on the notifier / applicant comments	Column D Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	Open point: 2.4 Reference values (ADI, ARfD and AOEL) to be agreed on at a meeting of experts. See reporting table 2(9)	We agree with the proposals done by the RMS in the Draft Assessment Report: o ADI non relevant o ARfD non relevant o AOEL 1 mg/kg b.w./d	**RMS (April 09):** no comment	PRAPeR 69 (4 – 8 May 2009): Open point fulfilled. ADI, AOEL, ARfD not required.
	Open point: 2.5 Operator, worker and bystander exposure to be confirmed at a meeting of experts. See reporting table 2(10)	We agree with the Draft Assessment Report suggested by the RMS related to a weak exposure of 12.79 µg/kg b.w./d representing 1.28 % of the proposed AOEL. This value is lower than consumer exposure through its daily diet (example of apple juice: 1.2 mg/d, *i.e.* for an average adult of 70 kg, 17 µg/kg b.w. / d)	**RMS (April 09):** agreed	PRAPeR 69 (4 – 8 May 2009): Open point fulfilled. Exposure estimates not required.
	Message from section 1 (phys-chem): Patulin may be present in the technical active ingredient. Please advise on maximum level of Patulin which can be considered as safe.			PRAPeR 69 (4 – 8 May 2009): Answer: The maximum intake of patulin from food (TMDI) is 0.4 µg/kg bw/d (JECFA, 2000 as confirmed by the SCF). The safe limit should be set as 50 µg/kg (fruit juices, concentrated fruit juices as reconstituted and fruit nectars) according to Commission Regulation No 1881/2006. Therefore, the maximum level of Patulin which can be considered as safe in the technical specification is 50 µg/kg.
	Message to section 1 (Phys-chem): Boric acid is produced during			Message sent to section 1.

No.	Column A Conclusions from the Reporting Table	Column B Comments from the notifier / applicant	Column C Rapporteur Member State comments on the notifier / applicant comments	Column D Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	the production of the product – does Boric acid appear in the final technical product? This is a repro Cat2 hence concerns were raised by experts.			

REPORT OF PRAPeR EXPERT MEETING 70

HEPTAMALOXYLOGLUCAN

Rapporteur Member State: FR

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
May 2007	FR	Heptamaloxyloglucan list of data relied on (May 2007) ver1.doc
January 2009	FR	Heptamaloxyloglucan_DAR_Vol1_corrigendum 1 (January 2009).doc
2009-04-07	FR	Heptamaloxyloglucan_evaluation table rev1-0 (2009-04-07).doc
May 2007	FR	Heptamaloxyloglucan_list of endpoints (May 2007)_tox_residues.doc
2009-02-11	FR	Heptamaloxyloglucan_reporting table rev 1-1 (2009-02-11).doc

3. Documents tabled at the meeting:

Date	Supplier	File Name
none		

The conclusions of the meeting were as follows:

4. **Data on preparations:** PEL 101GV

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: HEPTAMALOXYLOGLUCAN

Appendix 2: Evaluation table

Appendix 1: Discussion Table, Heptamaloxyloglucan

3. Residues

No.	Subject	Discussion Expert Meeting	Conclusions Expert Meeting
	There were no specific items to be discussed at the PRAPeR 70 meeting of experts on residues for this substance.	Heptamaloxyloglucan is a natural compound, an apple extract used early in season [up to BBCH 16] at a very low dose rate of 500 mg/ha. Taking into account this agricultural practice, no detectable residues are expected in crop at harvest. In apple juice the natural levels are about 8 mg/l. The question was raised concerning how this compound may act at such a low application rate and whether its efficacy was proven. Considering the very low application rate and that heptamaloxyloglucan is a natural occurring compound, the experts agreed that no further information is requested for this compound. This compound is a candidate for Annex IV of Regulation (EC) 396/2005.	

Appendix 2: Evaluation table

3. Residues

No.	Column A Conclusions from the Reporting Table	Column B Comments from the notifier / applicant	Column C Rapporteur Member State comments on the notifier / applicant comments	Column D Recommendations of the PRAPeR Expert Meeting / Conclusions from the written procedure
	Section 3 Open points: ***0*** Points for clarification: ***0*** Data requirements: ***0***	-	-	