

REASONED OPINION OF EFSA

Modification of the existing MRL for chlormequat in pears¹

Prepared by the Pesticides Unit (PRAPeR)

(Question No EFSA-Q-2008-741)

Issued on 05 February 2009

SUMMARY

According to Article 6(3) of Regulation (EC) No 396/2005, The Netherlands compiled an application to set a temporary MRL of 0.1 mg/kg for chlormequat in pears until 31 July 2014 in order to accommodate for carry over of chlormequat residues due to uses formerly authorized in pear trees. The subsequent evaluation report, drafted by The Netherlands as well, was forwarded to EFSA on 07 October 2008 according to Article 9 of the Regulation.

Based on the evaluation report and the supporting dossier submitted by The Netherlands, EFSA derives the following conclusions regarding the application.

Metabolism of chlormequat in pears was not investigated. However, carry over of chlormequat in pear orchards is caused by the slow degradation of the parent compound in pear trees and the accumulation of unchanged chlormequat in the stem. Other significant metabolites are therefore not expected and further data are not required. An analytical method for enforcement of chlormequat in pears is also available.

Supervised residues field trials are reported where levels of chlormequat in pears have been monitored over a period of 9-10 years following the revocation of chlormequat authorizations in pears. Residue levels in pears sampled in 2007 were found to be below the LOQ of 0.05 mg/kg. In addition, both targeted and untargeted monitoring data collected between 1999 and 2008 were provided. Based on these data it is demonstrated that for the harvest of 2009 chlormequat levels in untargeted pear samples will be below the LOQ in more than 95 % of the cases while chlormequat levels in targeted pear samples are expected to be below the LOQ in less than 95% of the cases. It is therefore concluded that a temporary MRL of 0.1 mg/kg until 31 July 2014 might be required on the condition that from a risk management point of view the MRL is expected to accommodate both targeted and untargeted pear samples. If the MRL is only expected to cover residue levels in untargeted samples, the setting of a temporary MRL for chlormequat in pears is no longer necessary.

The possible occurrence of chlormequat residues in rotational crops was not investigated because pear trees are perennial, meaning that they are not grown in rotation with other crops.

¹ For citation purposes: Reasoned opinion of EFSA prepared by the Pesticides Unit (PRAPeR) on the modification of the existing MRL for chlormequat in pears. *EFSA Scientific Report (2009) 232, 1-34*

Residues in commodities of animal origin were not assessed neither considering that pears and its by-products are usually not fed to livestock.

Finally, chronic intake calculations were performed considering the MRL of 0.1 mg/kg proposed by The Netherlands for chlormequat in pears as well as all existing MRLs for the active substance. The calculations are based on revision 2 of the EFSA PRIMo and no chronic intake concerns are identified for all available European diets. An acute intake calculation was also undertaken for the MRL of 0.1 mg/kg in pears and no acute intake concern was identified.

Key words: chlormequat, pears, MRL application, Regulation (EC) No 396/2005, quaternary ammonium plant growth regulators

TABLE OF CONTENTS

Background 4

Terms of reference..... 4

The active substance and its use pattern..... 5

Assessment 6

1. Methods of analysis 6

 1.1. Methods for enforcement of residues in food of plant origin 6

 1.2. Methods for enforcement of residues in food of animal origin 6

2. Mammalian toxicology 6

3. Residues..... 7

 3.1. Nature and magnitude of residues in plant..... 7

 3.1.1. Primary crops..... 7

 3.1.1.1. Nature of residues 7

 3.1.1.2. Magnitude of residues..... 7

 3.1.1.3. Effect of industrial processing and/or household preparation 9

 3.1.2. Rotational crops..... 10

 3.2. Nature and magnitude of residues in livestock 10

4. Consumer risk assessment 10

Conclusions and recommendations 12

References 13

Appendices 13

Glossary / Abbreviations..... 34

BACKGROUND

Regulation (EC) No 396/2005 establishes the rules governing the setting of pesticide MRLs at Community level. Article 6 of that regulation lays down that where a Member State considers that the modification of an MRL is necessary, that Member State may compile and evaluate an application to modify the MRL in accordance with the provisions of Article 7 of that regulation.

In particular, The Netherlands, hereafter referred to as the Evaluating Member State (EMS), compiled an application to modify the existing MRL for the active substance chlormequat in pears. This application was notified to the European Commission and EFSA and subsequently evaluated by the EMS in accordance with Article 8 of the Regulation.

After completion, the evaluation report of the EMS was submitted to the European Commission who forwarded the application, the evaluation report and the supporting dossier to EFSA on 07 October 2008. The application was included in the EFSA Register of Question with the reference number EFSA-Q-2008-741 and the following subject:

Chlormequat (Chloride) - Application to modify the existing MRL for chlormequat in pears from 0.2 mg/kg to 0.1 mg/kg. From 31 July 2009 the LOQ of 0.05 mg/kg should apply; Request for the lowering of current tMRL of 0.2 mg/kg to 0.1 mg/kg and extension of this tMRL until 31 July 2014.*

After reception of the evaluation report EFSA proceeded with the assessment of the application as required by Article 10 of the Regulation.

TERMS OF REFERENCE

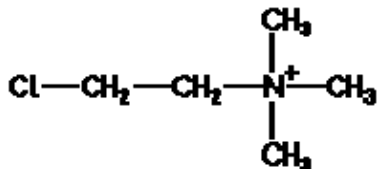
According to Article 10 of Regulation (EC) No 396/2005, EFSA shall, based on the evaluation report provided by the Evaluating Member State, provide a reasoned opinion on the risks to the consumer associated with the application. Particular attention shall be given to the requirements set out in that Article.

According to Article 11 of that Regulation, the reasoned opinion shall be provided as soon as possible and at the latest within 3 months from the data of receipt of the application. Where EFSA requests supplementary information, the time limit laid down shall be suspended until that information has been provided.

In this particular case the calculated deadline for providing the reasoned opinion is 07 January 2009.

THE ACTIVE SUBSTANCE AND ITS USE PATTERN

Chlormequat is the ISO common name for 2-chloroethyltrimethylammonium (IUPAC).



Chlormequat belongs to the class of quaternary ammonium plant growth regulators. It is usually applied as a chloride salt. Chlormequat inhibits cell elongation, which results in a sturdier plant by shortening and strengthening the stem. It may also be used to increase the flowering and/or fruit setting. It mainly acts by inhibiting the gibberellin biosynthesis.

Chlormequat was evaluated in the framework of Directive 91/414/EEC as a stage 3 active substance with The United Kingdom being the designated Rapporteur Member State (RMS). The representative uses supported for the peer review process include a single foliar application on winter and spring wheat, winter and spring barley, triticale, durum wheat, spelt wheat, rye and oats from growth stage of BBCH 30 up to growth stage of BBCH 49, in all EU countries. The peer review for this active substance resulted in a decision on inclusion of the active substance in Annex I of the Directive, which was taken on 23 January 2009 in the Standing Committee on the Food Chain and the Animal Health but not yet published by a directive.

EC MRLs for chlormequat in animal and plant commodities, including cereals, have been set for the first time in 1996, which were revised in 2000 by Directive 2000/42/EC. As a result of this revision, the MRL for chlormequat in pears was set at the analytical limit of quantification (LOQ) of 0.05 mg/kg because the use of chlormequat in pears was no longer authorised. This MRL however did not consider the carry over of chlormequat residues due to the previously authorised uses in pear trees. Chlormequat has the ability to accumulate in pear trees resulting in chlormequat residues in the pears several years after application. In order to address this contamination, the MRL was temporarily increased to 0.5 mg/kg in 2001. As the contamination level decreased over the years, the temporary MRL in pears was lowered on several occasions. The last modification of the MRL dates from 2008 where the MRL was set at 0.2 mg/kg until 31 July 2009. This value was transferred to Regulation (EC) No 396/2005 without any modification.

According to the current legislation for chlormequat in pears the LOQ of 0.05 mg/kg will apply as from 01 August 2009. The Netherlands is however of the opinion that based on the currently available monitoring data residue levels of chlormequat in pears will still exceed the LOQ after that date. An application to maintain a temporary MRL at 0.1 mg/kg until 31 July 2014 was therefore submitted. In support of the MRL application an evaluation report was prepared by The Netherlands.

ASSESSMENT

1. Methods of analysis

1.1. Methods for enforcement of residues in food of plant origin

According to the EFSA conclusion on chlormequat (EFSA, 2009) adequate methods are available for enforcement of chlormequat, including its salts, in matrices with a high content of water, acid or oil as well as in dry commodities. The analytical method uses liquid chromatography with detection by double mass spectrometry. A LOQ of 0.5 mg/kg was derived for dry commodities, while a LOQ of 0.05 mg/kg was derived for the other commodity groups.

Considering that pears belong to the group of commodities with high water content, it is possible to enforce chlormequat in pears with a LOQ of 0.05 mg/kg.

1.2. Methods for enforcement of residues in food of animal origin

The availability of an analytical method for enforcement of residues in food of animal origin was not considered in the framework of this application. Pears and their by-products are usually not fed to animals and residues in animal commodities resulting from the reported contamination are therefore not expected.

2. Mammalian toxicology

The toxicological properties of chlormequat have been evaluated under Directive 91/414/EEC (EFSA, 2009) and reference values have been derived for chlormequat chloride. Considering that the residue definition for risk assessment is defined as chlormequat in the framework of this application, reference values are also recalculated to chlormequat based on the molecular weight of both compounds. The reference values are summarized in the table below.

Table 2-1. Overview of the toxicological reference values

	Source	Year	Value (mg/kg bw/d)	Study relied upon	Safety factor
Reference values expressed as chlormequat chloride					
ADI	EFSA	2009	0.04	1-year dog study	100
ARfD	EFSA	2009	0.09	4-week dog study	100
Reference values expressed as chlormequat					
ADI	EFSA	2009	0.031	1-year dog study	100
ARfD	EFSA	2009	0.070	4-week dog study	100

n.n.: not necessary

3. Residues

3.1. Nature and magnitude of residues in plant

3.1.1. Primary crops

3.1.1.1. Nature of residues

The metabolism of chlormequat chloride was investigated in wheat (EFSA, 2009). The main component in grain and straw at harvest was unmetabolised chlormequat. Considering that the available analytical methods determine the chlormequat cation the relevant residue for both enforcement and risk assessment was defined as chlormequat and its salts, expressed as chlormequat chloride. This residue definition is only applicable to cereals.

No metabolism studies are available for chlormequat in fruit crops and carry over of chlormequat residues was only monitored for the unchanged parent compound so far. However, the carry over seems to be caused by the slow degradation and subsequent accumulation of parent chlormequat in the stem of the trees (The Netherlands, 2008). Presence of other significant metabolites is therefore not expected. Also considering that the existing temporary MRL in pears is set for chlormequat, it is proposed to define the relevant residue as chlormequat in the framework of this application.

An analytical method is available for enforcement of the parent compound in pears (see also section 1.1).

3.1.1.2. Magnitude of residues

Currently, the use of chlormequat in pears is no longer authorised but a temporary MRL of 0.2 mg/kg applies in order to accommodate for carry over of chlormequat residues from uses formerly authorized in Belgium and in The Netherlands. This temporary MRL will expire on 01 August 2009, but according to The Netherlands (2008), levels of chlormequat in pears are still expected to exceed the LOQ of 0.05 mg/kg after that day. The Netherlands therefore propose to set a new temporary MRL of 0.1 mg/kg until 31 July 2014. In the Dutch evaluation report, different sources of information supporting this proposal are reported.

Five field trials are reported where levels of chlormequat in pears have been monitored over a period of 9-10 years following the revocation of chlormequat authorizations in pears. The pears investigated originate from orchards with a known history of chlormequat treatments. Two of these trials were not continued after 2005 and do not provide any information regarding the decline of residues over the last few years. The three other trials indicate a fast breakdown of residues during the first years followed by a slower degradation over the last years. In 2007 the wood and the roots of the contaminated trees were also sampled and average chlormequat levels of 7.2 mg/kg and 48 mg/kg were found, respectively. According to the Netherlands, this means that theoretically chlormequat might still be translocated to the fruits. Nevertheless, residue levels in the pears harvested in 2007 were found to be below the LOQ of 0.05 mg/kg. Significant translocation from the trunks to the fruits is therefore not expected in practice.

In addition, The Netherlands provided the official Belgian and Dutch monitoring data for chlormequat in pears (Appendix A and B) after untargeted sampling. In order to predict the

expected residue levels for the harvest of 2009, both data sets were pooled and sorted by year of harvest, assuming that the harvest of pears starts on the 1st of August that year and that harvested pears might be present on the market until 31st of July the following year (see Table 3-1). Pear samples originating from third countries were not included as chlormequat used to be authorized in Belgium and in The Netherlands. Data for the harvest of 2003 were not included as well due to the limited number of samples.

Table 3-1. Summary of the official monitoring data combined for Belgium and the Netherlands (untargeted).

Year of harvest	Total number of samples	≤0.05 mg/kg	0.06-0.10 mg/kg	0.11-0.20 mg/kg	0.21-0.50 mg/kg	Highest residue
2004	51	42	5	4	0	0.19
2005	27	19	6	2	0	0.14
2006	109	100	3	5	1	0.41
2007	54	49	4	1	0	0.13

Considering that MRLs based on monitoring data are usually calculated as the 95th percentile of a residue population, the 95th percentiles for each year of harvest were calculated and plotted in a graph (see Figure 3-1). A steady decline of chlormequat residues over the years is observed and, assuming an exponential degradation curve, it can be predicted that in 2009 the 95th percentile of the chlormequat levels will be below the LOQ of 0.05 mg/kg. This means that for the harvest of 2009 chlormequat levels in untargeted pear samples will be below the LOQ in more than 95 % of the cases.

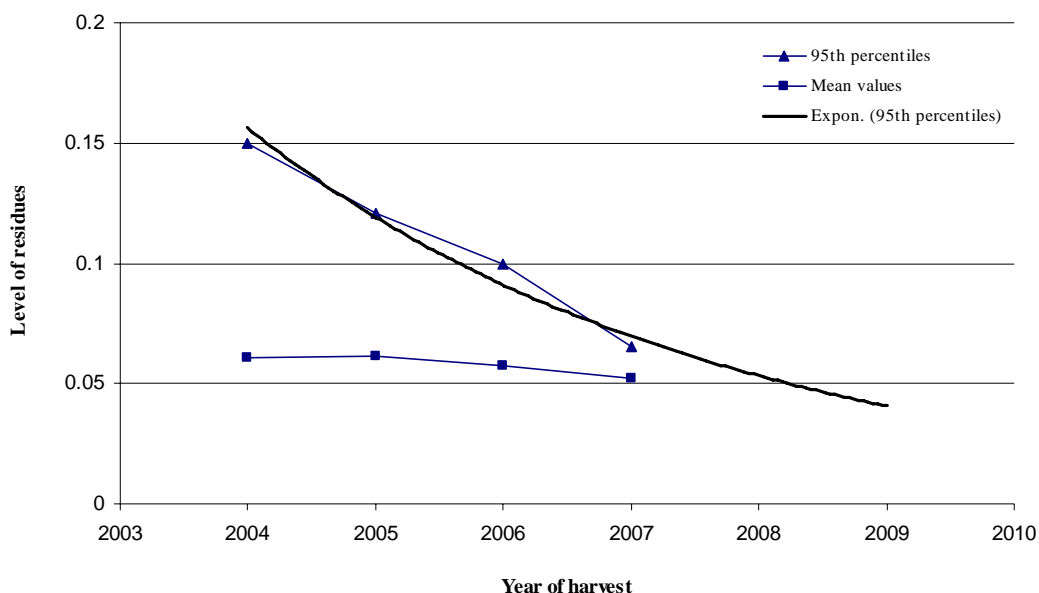


Figure 3-1. Decline of residues based on the official monitoring data combined for Belgium and the Netherlands (untargeted), including an exponential trend line for the 95th percentiles ($y = 5E+233e^{-0.2695x}$, $R^2 = 0.9605$).

The Netherlands also reported monitoring data compiled by the Dutch Fruit Growers Organization (Appendix C). These monitoring data are targeted because only fruit growers with a known history of chlormequat use were selected. Pears of these growers were then sampled and analyzed on a yearly basis. As for the untargeted monitoring data, the decline of residues over the years was investigated by sorting the data for each year of harvest and by calculating the 95th percentiles. Data collected before 2000 were however not included in order to emphasize the degradation of chlormequat over the last years.

Table 3-2. Summary of the monitoring data collected by the Dutch Fruit Growers Organization (targeted).

Year of harvest	Total number of samples	≤0.05 mg/kg	0.06-0.10 mg/kg	0.11-0.20 mg/kg	0.21-0.50 mg/kg	>0.50 mg/kg	Highest residue
2000	49	1	8	15	21	4	0.95
2001	59	8	14	15	19	3	2
2002	69	19	20	19	11	0	0.5
2003	63	33	22	5	3	0	0.32
2004	63	47	11	4	1	0	0.24
2005	51	37	11	1	2	0	0.27
2006	50	36	7	5	2	0	0.22
2007	48	39	7	2	0	0	0.18
2008	46	39	3	4	0	0	0.17

Figure 3-2 demonstrates that the 95th percentiles for targeted monitoring data are generally higher than for the untargeted data (see also Figure 3-1). Also the decline of residues is less consistent, in particular over the last three years, and a reliable degradation curve cannot be predicted. It is therefore not excluded that for the harvest of 2009 more than 5% of the targeted samples will exceed the LOQ of 0.05 mg/kg.

Comparing the data for targeted and untargeted sampling, it is concluded that a temporary MRL of 0.1 mg/kg until 31 July 2014 might be required on the condition that from a risk management point of view the MRL is expected to accommodate both targeted and untargeted pear samples. If the MRL is only expected to cover residue levels in untargeted samples, the setting of a temporary MRL for chlormequat in pears is no longer necessary.

3.1.1.3. Effect of industrial processing and/or household preparation

Exposure of consumers to chlormequat residues through the consumption of pears represents less than 10% of the ADI. Further investigation of residues in processed commodities is therefore not required.

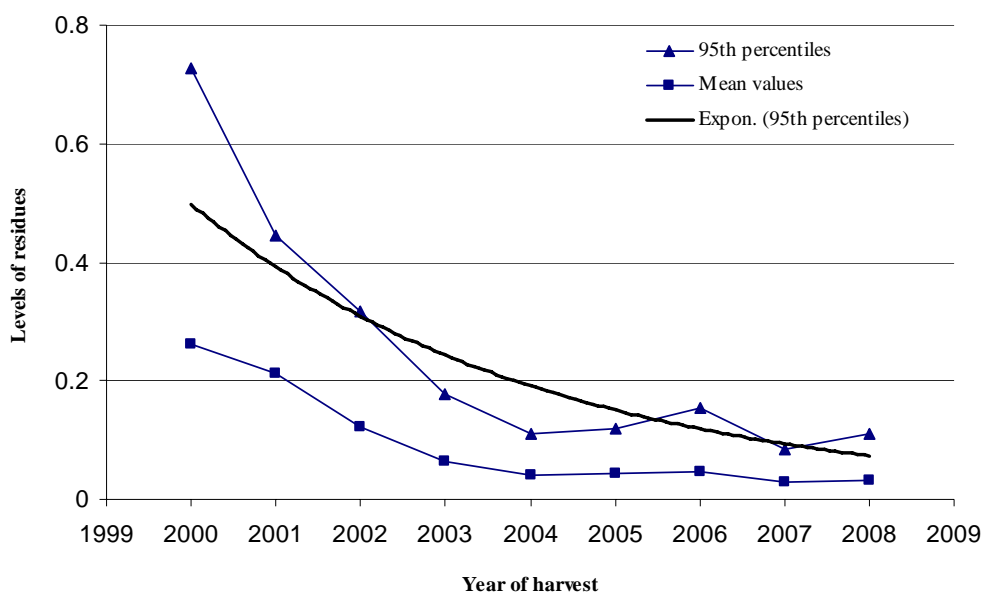


Figure 3-2. Decline of based on the monitoring data collected by the Dutch Fruit Growers Organization (targeted), including an exponential trend line for the 95th percentiles ($y = 8E+206e^{-0.2386x}$, $R^2 = 0.7993$).

3.1.2. Rotational crops

Considering that the MRL application under consideration is resulting from a contamination and that pear trees are perennial, occurrence of chlormequat residues in rotational crops are not further considered in this framework.

3.2. Nature and magnitude of residues in livestock

Occurrence of chlormequat residues in food of animal origin was not further considered in the framework of this application. Pears and their by-products are usually not fed to animals and residues in animal commodities resulting from the reported contamination are therefore not expected.

4. Consumer risk assessment

As explained under section 3.1.1.2, the acceptance of the temporary MRL proposed by The Netherlands (2008) for chlormequat in pears will mainly depend on the risk management decision to base the MRL on targeted or untargeted monitoring data. In order to facilitate this decision, chronic intake calculations using revision 2 of the EFSA PRIMo were carried out considering the existing MRLs for chlormequat (Appendix D) as well as the temporary MRL of 0.1 mg/kg proposed by The Netherlands. Considering that the proposed MRL of 0.1 mg/kg is based on predictions rather than actual data and that EFSA has no data on the registered uses for all remaining commodities, the MRLs instead of the STMRs were used as the input data for the intake calculations. This approach is expected to overestimate real exposure to

chlormequat residues because the residue definitions for enforcement and risk assessment are expected to be the same.

An acute intake calculation was also carried out for the proposed MRL of 0.1 mg/kg in pears, using revision 2 of the EFSA PRIMo as well. Considering that the proposed MRL is based on predictions rather than actual data, the MRL is used in the intake calculations instead of the HR.

As the existing MRLs are set for chlormequat, the reference values expressed as chlormequat were used both for chronic and acute intake calculations.

Detailed results of the chronic and acute intake calculations are reported in Appendix E to this document. Intake calculations for all European diets result in a chronic exposure not higher than 76.6% of the ADI and contribution of pears to this exposure is very minor (less than 0.2% of the ADI). Acute exposure to chlormequat through consumption of pears with residues at the proposed level of 0.1 mg/kg amounts to 13.0% of the ARfD.

CONCLUSIONS AND RECOMMENDATIONS

According to Article 6(3) of Regulation (EC) No 396/2005, The Netherlands compiled an application to set a temporary MRL of 0.1 mg/kg for chlormequat in pears until 31 July 2014 in order to accommodate for carry over of chlormequat residues due to uses formerly authorized in pear trees. The subsequent evaluation report, drafted by The Netherlands as well, was forwarded to EFSA on 07 October 2008 according to Article 9 of the Regulation.

Based on the evaluation report and the supporting dossier submitted by The Netherlands, EFSA derives the following conclusions regarding the application.

Metabolism of chlormequat in pears was not investigated. However, carry over of chlormequat in pear orchards is caused by the slow degradation of the parent compound in pear trees and the accumulation of unchanged chlormequat in the stem. Other significant metabolites are therefore not expected and further data are not required. An analytical method for enforcement of chlormequat in pears is also available.

Supervised residues field trials are reported where levels of chlormequat in pears have been monitored over a period of 9-10 years following the revocation of chlormequat authorizations in pears. Residue levels in pears sampled in 2007 were found to be below the LOQ of 0.05 mg/kg. In addition, both targeted and untargeted monitoring data collected between 1999 and 2008 were provided. Based on these data it is demonstrated that for the harvest of 2009 chlormequat levels in untargeted pear samples will be below the LOQ in more than 95 % of the cases while chlormequat levels in targeted pear samples are expected to be below the LOQ in less than 95% of the cases. It is therefore concluded that a temporary MRL of 0.1 mg/kg until 31 July 2014 might be required on the condition that from a risk management point of view the MRL is expected to accommodate both targeted and untargeted pear samples. If the MRL is only expected to cover residue levels in untargeted samples, the setting of a temporary MRL for chlormequat in pears is no longer necessary.

The possible occurrence of chlormequat residues in rotational crops was not investigated because pear trees are perennial, meaning that they are not grown in rotation with other crops. Residues in commodities of animal origin were not assessed neither considering that pears and its by-products are usually not fed to livestock.

Finally, chronic intake calculations were performed considering the MRL of 0.1 mg/kg proposed by The Netherlands for chlormequat in pears as well as all existing MRLs for the active substance. The calculations are based on revision 2 of the EFSA PRIMo and no chronic intake concerns are identified for all available European diets. An acute intake calculation was also undertaken for the MRL of 0.1 mg/kg in pears and no acute intake concern was identified.

REFERENCES

- EFSA, 2009. Conclusion of EFSA prepared by the Pesticides Unit (PRAPeR) on the peer review of the pesticide risk assessment of the active substance chlormequat (considered variant chlormequat chloride). *EFSA Scientific Report* (2008) 179, 1-77.
- The Netherlands, 2008. Request for an extension of the current temporary MRL for chlormequat on pears prepared by the Plant Protection Service in October 2008 under Regulation (EC) No 396/2005.

APPENDICES

- Appendix A – Official monitoring data from Belgium
- Appendix B – Official monitoring data from The Netherlands
- Appendix C – Monitoring data collected by the Dutch Fruit Growers Organization
- Appendix D – List of existing EC MRLs
- Appendix E – Pesticide Residues Intake Model (PRIMo)

APPENDIX A – OFFICIAL MONITORING DATA FROM BELGIUM

Sample code	Commodity	Sampling date	Active substance	Result	Origin
3259060022	Pears	07/04/2006	Chlorméquat	<LOQ (0,05)	BE
1077060026	Pears	11/04/2006	Chlorméquat	<LOQ (0,05)	BE
1077060027	Pears	11/04/2006	Chlorméquat	<LOQ (0,05)	BE
1077060028	Pears	11/04/2006	Chlorméquat	<LOQ (0,05)	BE
1077060025	Pears	11/04/2006	Chlorméquat	0,13	BE
2429060009	Pears	08/05/2006	Chlorméquat	<LOQ (0,05)	BE
2429060010	Pears	08/05/2006	Chlorméquat	0,051	BE
2429060011	Pears	15/05/2006	Chlorméquat	<LOQ (0,05)	CL
2429060013	Pears	15/05/2006	Chlorméquat	<LOQ (0,05)	BE
1406060067	Pears	14/06/2006	Chlorméquat	<LOQ (0,05)	AR
1406060068	Pears	15/06/2006	Chlorméquat	<LOQ (0,05)	NZ
2181060085	Pears	06/09/2006	Chlorméquat	<LOQ (0,05)	BE
2359060087	Pears	06/09/2006	Chlorméquat	<LOQ (0,05)	BE
1077060102	Pears	11/09/2006	Chlorméquat	<LOQ (0,05)	BE
1077060103	Pears	11/09/2006	Chlorméquat	<LOQ (0,05)	BE
1077060104	Pears	11/09/2006	Chlorméquat	<LOQ (0,05)	BE
1077060105	Pears	11/09/2006	Chlorméquat	<LOQ (0,05)	BE
2380060168	Pears	11/09/2006	Chlorméquat	<LOQ (0,05)	BE
1072060345	Pears	12/09/2006	Chlorméquat	<LOQ (0,05)	BE
1072060346	Pears	12/09/2006	Chlorméquat	<LOQ (0,05)	ES
2297060171	Pears	12/09/2006	Chlorméquat	<LOQ (0,05)	BE
2297060172	Pears	12/09/2006	Chlorméquat	<LOQ (0,05)	BE
1072060350	Pears	20/09/2006	Chlorméquat	<LOQ (0,05)	BE
1072060351	Pears	20/09/2006	Chlorméquat	<LOQ (0,05)	BE
1050060125	Pears	25/09/2006	Chlorméquat	<LOQ (0,05)	BE
2328060021	Pears	26/09/2006	Chlorméquat	<LOQ (0,05)	BE
2429060037	Pears	09/10/2006	Chlorméquat	<LOQ (0,05)	BE
2429060036	Pears	09/10/2006	Chlorméquat	0,16	BE
2328060022	Pears	10/10/2006	Chlorméquat	<LOQ (0,05)	BE
2429060038	Pears	10/10/2006	Chlorméquat	0,12	BE
2119060150	Pears	16/10/2006	Chlorméquat	<LOQ (0,05)	BE
2181060099	Pears	16/10/2006	Chlorméquat	<LOQ (0,05)	BE
2359060111	Pears	16/10/2006	Chlorméquat	<LOQ (0,05)	BE
1072060389	Pears	24/10/2006	Chlorméquat	<LOQ (0,05)	BE
1072060392	Pears	24/10/2006	Chlorméquat	<LOQ (0,05)	BE
1072060395	Pears	24/10/2006	Chlorméquat	<LOQ (0,05)	BE
1072060396	Pears	24/10/2006	Chlorméquat	<LOQ (0,05)	BE
2297060195	Pears	07/11/2006	Chlorméquat	<LOQ (0,05)	BE
2297060200	Pears	07/11/2006	Chlorméquat	<LOQ (0,05)	BE
2297060201	Pears	07/11/2006	Chlorméquat	<LOQ (0,05)	BE
2429060040	Pears	07/11/2006	Chlorméquat	<LOQ (0,05)	BE
3259060130	Pears	07/11/2006	Chlorméquat	0,054	BE
1406060115	Pears	22/11/2006	Chlorméquat	<LOQ (0,05)	CN
3259060125	Pears	22/11/2006	Chlorméquat	0,41	BE
3259060126	Pears	24/11/2006	Chlorméquat	<LOQ (0,05)	BE
1077060131	Pears	04/12/2006	Chlorméquat	<LOQ (0,05)	BE
1077060132	Pears	04/12/2006	Chlorméquat	<LOQ (0,05)	BE

Sample code	Commodity	Sampling date	Active substance	Result	Origin
1077060134	Pears	04/12/2006	Chlorméquat	<LOQ (0,05)	BE
1077060133	Pears	04/12/2006	Chlorméquat	0,12	BE
3260060215	Pears	11/12/2006	Chlorméquat	<LOQ (0,05)	BE
3260060216	Pears	11/12/2006	Chlorméquat	<LOQ (0,05)	BE
3260060217	Pears	11/12/2006	Chlorméquat	<LOQ (0,05)	BE
1077070009	Pears	15/01/2007	Chlorméquat	<LOQ (0,05)	BE
1077070010	Pears	15/01/2007	Chlorméquat	<LOQ (0,05)	BE
1077070011	Pears	15/01/2007	Chlorméquat	<LOQ (0,05)	BE
1077070012	Pears	16/01/2007	Chlorméquat	0.12	BE
1077070014	Pears	16/01/2007	Chlorméquat	<LOQ (0,05)	BE
1077070034	Pears	13/02/2007	Chlorméquat	<LOQ (0,05)	BE
1077070035	Pears	14/02/2007	Chlorméquat	<LOQ (0,05)	BE
1077070036	Pears	14/02/2007	Chlorméquat	<LOQ (0,05)	BE
1406070080	Pears	23/05/2007	Chlorméquat	<LOQ (0,05)	ZA
1406070100	Pears	07/06/2007	Chlorméquat	<LOQ (0,05)	NZ
1406070114	Pears	26/06/2007	Chlorméquat	<LOQ (0,05)	AR
1406070125	Pears	04/07/2007	Chlorméquat	<LOQ (0,05)	ZA
1213070075	Pears	30/08/2007	Chlorméquat	<LOQ (0,05)	BE
1406070146	Pears	30/08/2007	Chlorméquat	<LOQ (0,05)	CN
1213070082	Pears	10/09/2007	Chlorméquat	<LOQ (0,05)	BE
4646070025	Pears	11/09/2007	Chlorméquat	<LOQ (0,05)	CN
1077070120	Pears	18/09/2007	Chlorméquat	0.05	BE
1077070115	Pears	18/09/2007	Chlorméquat	<LOQ (0,05)	BE
1077070117	Pears	18/09/2007	Chlorméquat	<LOQ (0,05)	BE
1077070119	Pears	18/09/2007	Chlorméquat	<LOQ (0,05)	BE
1077070129	Pears	21/09/2007	Chlorméquat	0.069	BE
1077070130	Pears	21/09/2007	Chlorméquat	0.13	BE
1077070126	Pears	21/09/2007	Chlorméquat	<LOQ (0,05)	BE
1077070127	Pears	21/09/2007	Chlorméquat	<LOQ (0,05)	BE
1077070128	Pears	21/09/2007	Chlorméquat	<LOQ (0,05)	BE
1406070152	Pears	21/09/2007	Chlorméquat	<LOQ (0,05)	CN
2328070238	Pears	03/10/2007	Chlorméquat	<LOQ (0,05)	BE
1340070121	Pears	10/10/2007	Chlorméquat	<LOQ (0,05)	BE
1077070160	Pears	17/10/2007	Chlorméquat	<LOQ (0,05)	BE
1077070161	Pears	17/10/2007	Chlorméquat	<LOQ (0,05)	BE
1077070162	Pears	17/10/2007	Chlorméquat	<LOQ (0,05)	BE
2094070028	Pears	18/10/2007	Chlorméquat	0.061	BE
1077070163	Pears	19/10/2007	Chlorméquat	<LOQ (0,05)	BE
1077070164	Pears	19/10/2007	Chlorméquat	<LOQ (0,05)	BE
1077070165	Pears	22/10/2007	Chlorméquat	<LOQ (0,05)	BE
1077070167	Pears	22/10/2007	Chlorméquat	<LOQ (0,05)	BE
1077070169	Pears	22/10/2007	Chlorméquat	<LOQ (0,05)	BE
1077070171	Pears	22/10/2007	Chlorméquat	<LOQ (0,05)	BE
1077070175	Pears	22/10/2007	Chlorméquat	<LOQ (0,05)	BE
1077070177	Pears	22/10/2007	Chlorméquat	<LOQ (0,05)	BE
1213070109	Pears	22/10/2007	Chlorméquat	<LOQ (0,05)	BE
1213070110	Pears	22/10/2007	Chlorméquat	<LOQ (0,05)	BE
2094070032	Pears	22/10/2007	Chlorméquat	<LOQ (0,05)	BE
2429070063	Pears	23/10/2007	Chlorméquat	<LOQ (0,05)	BE
2429070065	Pears	23/10/2007	Chlorméquat	<LOQ (0,05)	BE
1077070183	Pears	24/10/2007	Chlorméquat	0.063	BE

Sample code	Commodity	Sampling date	Active substance	Result	Origin
1077070179	Pears	24/10/2007	Chlorméquat	<LOQ (0,05)	BE
1077070181	Pears	24/10/2007	Chlorméquat	<LOQ (0,05)	BE
1077070185	Pears	24/10/2007	Chlorméquat	<LOQ (0,05)	BE
2094070035	Pears	24/10/2007	Chlorméquat	<LOQ (0,05)	BE
1077070202	Pears	21/11/2007	Chlorméquat	<LOQ (0,05)	BE
1077070203	Pears	21/11/2007	Chlorméquat	<LOQ (0,05)	BE
1077070204	Pears	21/11/2007	Chlorméquat	<LOQ (0,05)	BE
1077070205	Pears	21/11/2007	Chlorméquat	<LOQ (0,05)	BE
1077070206	Pears	21/11/2007	Chlorméquat	<LOQ (0,05)	BE
1077070207	Pears	21/11/2007	Chlorméquat	<LOQ (0,05)	BE
1077070223	Pears	06/12/2007	Chlorméquat	0.079	BE
1077070221	Pears	06/12/2007	Chlorméquat	<LOQ (0,05)	BE
1077070222	Pears	06/12/2007	Chlorméquat	<LOQ (0,05)	BE
1077080004	Pears	10/01/2008	Chlorméquat	<LOQ (0,05)	BE
1077080005	Pears	10/01/2008	Chlorméquat	<LOQ (0,05)	BE
3091080002	Pears	22/01/2008	Chlorméquat	<LOQ (0,05)	BE
1077080013	Pears	05/02/2008	Chlorméquat	<LOQ (0,05)	BE
1077080014	Pears	05/02/2008	Chlorméquat	<LOQ (0,05)	BE
3091080007	Pears	07/02/2008	Chlorméquat	<LOQ (0,05)	BE
1406080008	Pears	19/02/2008	Chlorméquat	<LOQ (0,05)	ZA
1077080016	Pears	10/03/2008	Chlorméquat	0.049	BE
1077080017	Pears	10/03/2008	Chlorméquat	<LOQ (0,05)	BE
1406080035	Pears	03/04/2008	Chlorméquat	<LOQ (0,05)	ZA
1077080024	Pears	16/04/2008	Chlorméquat	0.017	BE
1077080023	Pears	16/04/2008	Chlorméquat	<LOQ (0,05)	BE
1406080066	Pears	28/05/2008	Chlorméquat	<LOQ (0,05)	ZA
1406080067	Pears	29/05/2008	Chlorméquat	<LOQ (0,05)	ZA
1406080068	Pears	29/05/2008	Chlorméquat	<LOQ (0,05)	ZA
1406080070	Pears	29/05/2008	Chlorméquat	<LOQ (0,05)	ZA
1406080078	Pears	02/06/2008	Chlorméquat	<LOQ (0,05)	ZA
1406080079	Pears	02/06/2008	Chlorméquat	<LOQ (0,05)	AR
1406080080	Pears	02/06/2008	Chlorméquat	<LOQ (0,05)	AR
1406080081	Pears	02/06/2008	Chlorméquat	<LOQ (0,05)	AR

APPENDIX B – OFFICIAL MONITORING DATA FROM THE NETHERLANDS

Sample code	Result	LOQ	Sampling date	Origin	Active substance	Commodity
34548374	0.1	0.05	06/01/2004	NL	chloormequat kation	Peren
48339891	0.07	0.05	08/01/2004	NL	chloormequat kation	Peren
46431448	0.05	0.05	14/01/2004	NL	chloormequat kation	Peren
46515404	0	0.05	11/02/2004	NL	chloormequat kation	Peren
34581169	0.08	0.05	02/03/2004	NL	chloormequat kation	Peren
48344461	0.16	0.05	23/03/2004	NL	chloormequat kation	Peren
45094677	0	0.05	26/03/2004	NL	chloormequat kation	Peren
44040409	0	0.05	06/04/2004	NL	chloormequat kation	Peren
48460291	0	0.05	27/04/2004	NL	chloormequat kation	Peren
45091112	0	0.05	11/05/2004	NL	chloormequat kation	Peren
47183294	0.11	0.05	12/07/2004	NL	chloormequat kation	Peren
46577531	0.05	0.05	31/08/2004	NL	chloormequat kation	Peren
48510353	0	0.05	14/09/2004	NL	chloormequat kation	Peren
48510426	0	0.05	14/09/2004	NL	chloormequat kation	Peren
48510396	0.05	0.05	14/09/2004	NL	chloormequat kation	Peren
48510388	0.16	0.05	14/09/2004	NL	chloormequat kation	Peren
48510434	0.05	0.05	14/09/2004	NL	chloormequat kation	Peren
48510442	0.05	0.05	14/09/2004	NL	chloormequat kation	Peren
48510418	0.05	0.05	14/09/2004	NL	chloormequat kation	Peren
48510361	0	0.05	14/09/2004	NL	chloormequat kation	Peren
48510469	0.05	0.05	14/09/2004	NL	chloormequat kation	Peren
44103141	0.05	0.05	28/09/2004	NL	chloormequat kation	Peren
44103133	0.05	0.05	28/09/2004	NL	chloormequat kation	Peren
44229242	0.05	0.05	05/10/2004	NL	chloormequat	Peren

Sample code	Result	LOQ	Sampling date	Origin	Active substance	Commodity
					kation	
44230402	0.05	0.05	12/10/2004	NL	chloormequat kation	Peren
45225828	0.05	0.05	18/10/2004	NL	chloormequat kation	Peren
45225801	0.15	0.05	18/10/2004	NL	chloormequat kation	Peren
48610803	0.05	0.05	19/10/2004	NL	chloormequat kation	Peren
48539289	0.06	0.05	19/10/2004	NL	chloormequat kation	Peren
48539203	0.19	0.05	19/10/2004	NL	chloormequat kation	Peren
45245551	0.05	0.05	27/10/2004	NL	chloormequat kation	Peren
45246116	0.05	0.05	10/11/2004	NL	chloormequat kation	Peren
44116332	0	0.05	06/12/2004	NL	chloormequat kation	Peren
44116359	0	0.05	06/12/2004	NL	chloormequat kation	Peren
44116324	0	0.05	06/12/2004	NL	chloormequat kation	Peren
44116529	0	0.05	07/12/2004	NL	chloormequat kation	Peren
44116464	0	0.05	07/12/2004	NL	chloormequat kation	Peren
44189003	0	0.05	10/01/2005	NL	chloormequat kation	Peren
44189135	0	0.05	10/01/2005	NL	chloormequat kation	Peren
48634591	0	0.05	14/01/2005	NL	chloormequat kation	Peren
46579186	0	0.05	18/01/2005	NL	chloormequat kation	Peren
57041471	0	0.05	25/01/2005	NL	chloormequat kation	Peren
57041455	0	0.05	25/01/2005	NL	chloormequat kation	Peren
57041412	0	0.05	25/01/2005	NL	chloormequat kation	Peren
44196603	0	0.05	08/02/2005	NL	chloormequat kation	Peren
44302713	0	0.05	14/02/2005	NL	chloormequat kation	Peren
44302578	0	0.05	14/02/2005	NL	chloormequat kation	Peren
44197812	0	0.05	14/02/2005	NL	chloormequat kation	Peren
44197847	0.06	0.05	14/02/2005	NL	chloormequat kation	Peren

Sample code	Result	LOQ	Sampling date	Origin	Active substance	Commodity
44303094	0	0.05	15/02/2005	NL	chloormequat kation	Peren
44303051	0.06	0.05	15/02/2005	NL	chloormequat kation	Peren
46705114	0	0.05	15/02/2005	NL	chloormequat kation	Peren
45470164	0	0.05	16/02/2005	NL	chloormequat kation	Peren
45470148	0	0.05	16/02/2005	NL	chloormequat kation	Peren
48636136	0.09	0.05	22/02/2005	NL	chloormequat kation	Peren
46716477	0.08	0.05	31/03/2005	NL	chloormequat kation	Peren
45277321	0	0.05	31/03/2005	NL	chloormequat kation	Peren
48707947	0	0.05	08/04/2005	NL	chloormequat kation	Peren
46655664	0.15	0.05	03/05/2005	NL	chloormequat kation	Peren
46655966	0	0.05	17/05/2005	NL	chloormequat kation	Peren
45278395	0	0.05	17/06/2005	NL	chloormequat kation	Peren
45390187	0	0.05	26/07/2005	NL	chloormequat kation	Peren
48958052	0	0.05	04/08/2005	NL	chloormequat kation	Peren
44377985	0	0.05	04/10/2005	NL	chloormequat kation	Peren
44377845	0	0.05	04/10/2005	NL	chloormequat kation	Peren
45396835	0.06	0.05	06/10/2005	NL	chloormequat kation	Peren
58371955	0	0.05	31/10/2005	NL	chloormequat kation	Peren
45404587	0.14	0.05	06/12/2005	NL	chloormequat kation	Peren
44315084	0	0.05	12/12/2005	NL	chloormequat kation	Peren
56267956	0	0.05	12/12/2005	NL	chloormequat kation	Peren
44315092	0	0.05	12/12/2005	NL	chloormequat kation	Peren
58323144	0	0.05	13/12/2005	NL	chloormequat kation	Peren
58317969	0	0.05	05/01/2006	NL	chloormequat kation	Peren
58317799	0.07	0.05	05/01/2006	NL	chloormequat kation	Peren
56051651	0	0.05	16/01/2006	NL	chloormequat	Peren

Sample code	Result	LOQ	Sampling date	Origin	Active substance	Commodity
					kation	
58129674	0	0.05	10/04/2006	NL	chloormequat kation	Peren
58216399	0	0.05	02/05/2006	NL	chloormequat kation	Peren
44511118	0.09	0.05	23/05/2006	NL	chloormequat kation	Peren
44614421	0.05	0.05	23/05/2006	NL	chloormequat kation	Peren
58149306	0.06	0.05	07/06/2006	NL	chloormequat kation	Peren
45799859	0.1	0.05	16/06/2006	NL	chloormequat kation	Peren
44626845	0	0.05	01/08/2006	NL	chloormequat kation	Peren
45762556	0	0.05	16/08/2006	NL	chloormequat kation	Peren
44713985	0	0.05	05/09/2006	NL	chloormequat kation	Peren
57960957	0	0.05	05/09/2006	NL	chloormequat kation	Peren
57878266	0	0.05	18/09/2006	NL	chloormequat kation	Peren
57878339	0	0.05	19/09/2006	NL	chloormequat kation	Peren
57673362	0	0.05	19/09/2006	NL	chloormequat kation	Peren
58586536	0	0.05	26/09/2006	NL	chloormequat kation	Peren
56308768	0	0.05	26/09/2006	NL	chloormequat kation	Peren
56523235	0	0.05	02/10/2006	NL	chloormequat kation	Peren
56556966	0	0.05	02/10/2006	NL	chloormequat kation	Peren
57962216	0	0.05	03/10/2006	NL	chloormequat kation	Peren
56306242	0	0.05	03/10/2006	NL	chloormequat kation	Peren
44615533	0	0.05	17/10/2006	NL	chloormequat kation	Peren
44615525	0	0.05	17/10/2006	NL	chloormequat kation	Peren
58188808	0	0.05	26/10/2006	NL	chloormequat kation	Peren
58188778	0	0.05	26/10/2006	NL	chloormequat kation	Peren
58607029	0	0.05	27/10/2006	NL	chloormequat kation	Peren
44817748	0	0.05	07/11/2006	NL	chloormequat kation	Peren

Sample code	Result	LOQ	Sampling date	Origin	Active substance	Commodity
45883876	0	0.05	15/11/2006	NL	chloormequat kation	Peren
45883825	0	0.05	15/11/2006	NL	chloormequat kation	Peren
56291776	0	0.05	20/11/2006	NL	chloormequat kation	Peren
56291628	0	0.05	20/11/2006	NL	chloormequat kation	Peren
44812568	0	0.05	21/11/2006	NL	chloormequat kation	Peren
45884031	0	0.05	21/11/2006	NL	chloormequat kation	Peren
45894746	0	0.05	22/11/2006	NL	chloormequat kation	Peren
45894762	0	0.05	22/11/2006	NL	chloormequat kation	Peren
45894886	0	0.05	22/11/2006	NL	chloormequat kation	Peren
67804961	0	0.05	05/12/2006	NL	chloormequat kation	Peren
56300732	0.12	0.05	10/12/2006	NL	chloormequat kation	Peren
56302573	0	0.05	12/12/2006	NL	chloormequat kation	Peren
45896021	0	0.05	12/12/2006	NL	chloormequat kation	Peren
58606014	0	0.05	13/12/2006	NL	chloormequat kation	Peren
44773716	0	0.05	09/01/2007	NL	chloormequat kation	Peren
44813823	0	0.05	11/01/2007	NL	chloormequat kation	Peren
58606138	0	0.05	11/01/2007	NL	chloormequat kation	Peren
56480714	0	0.05	16/01/2007	NL	chloormequat kation	Peren
67797965	0	0.05	16/01/2007	NL	chloormequat kation	Peren
55065276	0	0.05	29/01/2007	NL	chloormequat kation	Peren
55065268	0	0.05	29/01/2007	NL	chloormequat kation	Peren
56480811	0	0.05	30/01/2007	NL	chloormequat kation	Peren
44830574	0	0.05	30/01/2007	NL	chloormequat kation	Peren
44784734	0	0.05	30/01/2007	NL	chloormequat kation	Peren
67805461	0	0.05	12/02/2007	NL	chloormequat kation	Peren
55066167	0	0.05	14/02/2007	NL	chloormequat	Peren

Sample code	Result	LOQ	Sampling date	Origin	Active substance	Commodity
					kation	
55066124	0	0.05	14/02/2007	NL	chloormequat kation	Peren
55066086	0	0.05	14/02/2007	NL	chloormequat kation	Peren
55066035	0	0.05	14/02/2007	NL	chloormequat kation	Peren
55066078	0	0.05	14/02/2007	NL	chloormequat kation	Peren
55066043	0.06	0.05	14/02/2007	NL	chloormequat kation	Peren
44773848	0	0.05	20/02/2007	NL	chloormequat kation	Peren
58751642	0	0.05	22/02/2007	NL	chloormequat kation	Peren
67792696	0	0.05	26/02/2007	NL	chloormequat kation	Peren
56299246	0.05	0.05	06/03/2007	NL	chloormequat kation	Peren
56917624	0	0.05	20/03/2007	NL	chloormequat kation	Peren
58766313	0	0.05	21/03/2007	NL	chloormequat kation	Peren
56904395	0	0.05	22/03/2007	NL	chloormequat kation	Peren
44801019	0	0.05	12/04/2007	NL	chloormequat kation	Peren
58498394	0	0.05	31/05/2007	NL	chloormequat kation	Peren
56297987	0	0.05	04/06/2007	NL	chloormequat kation	Peren
67543238	0	0.05	11/06/2007	NL	chloormequat kation	Peren
58334782	0.07	0.05	27/06/2007	NL	chloormequat kation	Peren

APPENDIX C – MONITORING DATA COLLECTED BY THE DUTCH FRUIT GROWERS ORGANIZATION

Grower Nr	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998
1	0.01	0.075	0.15	0.14	0.17	0.1	0.36	0.25	0.38	1.1	3.5
2	volgt	0.012	0.04	0.02	0.05	0.07	0.06	0.21		na	4/<1
3	0.02	0.078	0.03	<0,01	<0,01	<0,01	0.14	0.2	0.17	1.6	1.5
4	0.04	0.01	0.04	0.06	0.09	0.09	0.19	0.077	0.26	na	4,3/ 6,6/ 3,2
5	0.05	0.052	0.04	0.09	0.08	0.16	0.2	0.24	0.5	0.51	5,6/ 4,6/ 2,6/ na
6	0.11	0.023	0.03	0.01	0.04	0.03	0.19	0.25	0.27	0.58	2.6
7									0.18	0.59	1.2
8	<0,01	<0,01	0.02	0.02	<0,01	0.06	0.03		0.22	0.55	3.1
9	0.01	0.016	0.02	0.04	<0,01	0.05	0.01	0.18	0.15	0.59	3,6/ 3,1/ 2,1
10	0.03	<0,01	0.02	0.09	0.03	0.04	0.04		0.17	0.93	2.2
11		<0,01	0.02	0.02	<0,01	0.03	0.09	0.43	0.29	0.69	1.8
12	0.03	0.069	0.08	0.07	0.06	0.05	0.12	0.11	0.25	0.51	3,8/ 5,0/ 6,2/ 3,1
13							0.05	2	0.92	5,1/ 3,2	
14									0.38		
15									0.23	1.1	5.4
16									0.29	1.8	5,7/ 5,0
17									0.13	0.9	5,7/ 4,7/ 3,8/ 1,0
18	0.02	0.017	0.01	0.01	0.03	0.04	0.22	0.19	0.06		<1
19	0.01	<0,01	0.01	0.02	<0,01	0.01	0.01	0.1	0.11	1.1	6,5/ 6,0
20									0.31	2.4	na/ na
21	<0,01	0.02	0.08	0.05	0.1	0.07	0.25	0.084	0.26	0.67	<1
22			0.02	0.06	0.03	0.03	0.08	0.25	0.32	0.73	<1
23	<0,01	<0,01	<0,01	<0,01	<0,01	<0,01		na	0.1	na	11
24	0.11	0.14	0.07	0.25	0.24	0.31	0.28	na/ 0,57/ 0,88	0.73	1.3	11/ 3,3
25	0.02	0.026	0.12	0.03	0.03	0.07	0.05	0.17	0.35	2.3	9,5/ 1,0
26									na	na	
27									0.09		1.4

Grower Nr	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998
28	<0,01	<0,01	< 0,01	< 0,01	0.01	0.02	0.05	na	0.07	< 0,5	
29	0.03	0.035	0.09	0.1	0.07	0.07	0.17	na	0.72	1.1	6,9/ 2,6
30									na	0.79	
31									0.17	1.3	1.7
32	<0,01	0	0	<0,01	<0,01	0.13	0.09	0.13	-	-	1,7/ 4,4
33	0.03	0.015	0.03	0.04	0.02	0.04	0.13	0.13	<0,05	-	1.9
34	0.04	0	0.02	0.01	<0,01	0.04	0.08	0.22	0.79	n.a.	2.2
35	0.03	0	0.1	0.06	<0,01	0.18	0.03	0.19	0.34	1.6	10
36	0.14	0.18	0.21	0.27	<0,01	0.06	0.09	0.098	-	3.3	1.3
37	0.02	0	0	0.01	<0,01	0.07	0.08	0.18	-	0.97	2.4
38	<0,01	0	0	<0,01	0.03	<0,01	0.07	0.061	-	n.a.	1.2
39	0.02	0.024	0.04	0.07	<0,01	0.05	<0,01	n.a.	0.075	n.a.	3.3
40	0.17	0.067	0.16	0.03	0.08	0.09	0.16	0.42	-	1.2	2.1
41	<0,01	0.011	0.02	0.02	0.05	0.06	0.11	0.13	-	-	3.3
42	0.07	0.04	0.1	0.07	0.09	0.06	0.34	0.18	-	0.68	3.1
43	<0,01	0	0.13	0.08	<0,01	<0,01	0.04	0.28	-	-	13
44	0.03	0	0.02	0.02	0.04	0.06	0.06	0.12	-	-	1.6
45			-	-	0.11	0.32	0.36	0.28	0.45	0.94	6.2
46	<0,01	0	0	<0,01	0.04	<0,01	0.19	0.26	0.32	n.a.	11
47	0.08	0	0	0.06	0.02	0.13	0.22	0.31	0.25	0.93	2.9
48	0.02	0.023	0.02	0.02	0.02	0.05	0.09	0.11	0.42	0.87	-
49	<0,01	0	0	<0,01	0.02	<0,01	0.08	0.054	0.086	-	1.1
50	<0,01	0	0	0.02	0.02	0.06	0.11	0.095	0.15	1	4.1
51	0.07	0.089	0.11	0.03	0.03	0.3	0.07	0.052	0.16	0.66	5.5
52	0.02	0.059	0.07	0.05	0.01	0.06	0.22	0.22	0.15	0.5	5.4
53	<0,01	0.027	0.01	<0,01	0.11	0.07	0.21	0.21	0.2	-	3.6
54	<0,01	0.03	0	0.02	<0,01	<0,01	0.18	0.29	0.18	n.a.	3
55	<0,01	0	0.01	<0,01	<0,01	<0,01	0.05	n.a.	0.23	0.63	<1
56	<0,01	0	0	<0,01	<0,01	0.07	0.5	n.a.	0.18	0.54	4.3
57	<0,01	0	0	0.01	<0,01	<0,01	<0,01	n.a.	0.076	n.a.	2.8
58	<0,01	0	0.22	0.04	0.07	0.07	0.27	n.a.	0.2	0.64	6,4/ 2,8
59	<0,01	0.02	0.01	0.02	0.19	0.03	0.11	0.16	0.29	n.a.	3.8
60			0		-	-	<0,01	n.a.	0.08	-	4,1/ 1,5
61	0.01	0.021	0.03	0.02	0.03	0.03	0.08	<0,05	-	-	<1
62				0.03	0.02	<0,01	0.06	0.2	-	0.75	-
63	0.02	0.034	0.01	0.05	0.06	0.02	0.09	0.053	0.13	n.a.	-
64				0.03	<0,01	0.08	0.08	0.08	-	-	-
65							0.12	0.23			
66							0.15	0.25			
67					0.02	0.06	0.17	0.05			
68					<0,01	<0,01	0.08	0.3			
69						0.16	0.2	<0,05			
70					0.06	0.02	0.05	0.06			

Grower Nr	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	1998
71							0.02	<0,05			
72					<0,01	0.09	0.02	<0,05			
73					<0,01	0.01	0.09	0.05			
74							0.06	0.32			
75					<0,01	<0,01	0.01	0.07			
76					<0,01	0.1	0.09	0.06			
77					<0,01	0.01	0.03	<0,05			
78							0.03	0.07			
79					<0,01	0.04	0.18	<0,05			
80					0.08		0.18				
81					<0,01	<0,01					
totaal	47	48	50	51	63	63	69	58	49	39	75
AVG**	0.030	0.030	0.047	0.044	0.04	0.06	0.12	0.21	0.26	1.21	3.89

APPENDIX D – LIST OF EXISTING EC MRLS

Pesticides - Web Version - EU MRLs (File created on 02/02/2009 15:12)		
Code number	Groups and examples of individual products to which the MRLs apply (a)	Chlormequat
100000	1. FRUIT FRESH OR FROZEN; NUTS	
110000	(i) Citrus fruit	0,05*
110010	Grapefruit (Shaddocks, pomelos, sweeties, tangelo, ugli and other hybrids)	0,05*
110020	Oranges (Bergamot, bitter orange, chinotto and other hybrids)	0,05*
110030	Lemons (Citron, lemon)	0,05*
110040	Limes	0,05*
110050	Mandarins (Clementine, tangerine and other hybrids)	0,05*
110990	Others	0,05*
120000	(ii) Tree nuts (shelled or unshelled)	0,1*
120010	Almonds	0,1*
120020	Brazil nuts	0,1*
120030	Cashew nuts	0,1*
120040	Chestnuts	0,1*
120050	Coconuts	0,1*
120060	Hazelnuts (Filbert)	0,1*
120070	Macadamia	0,1*
120080	Pecans	0,1*
120090	Pine nuts	0,1*
120100	Pistachios	0,1*
120110	Walnuts	0,1*
120990	Others	0,1*
130000	(iii) Pome fruit	
130010	Apples (Crab apple)	0,05*
130020	Pears (Oriental pear)	0,2 (ft)
130030	Quinces	0,05*
130040	Medlar	0,05*
130050	Loquat	0,05*
130990	Others	0,05*
140000	(iv) Stone fruit	0,05*
140010	Apricots	0,05*
140020	Cherries (sweet cherries, sour cherries)	0,05*
140030	Peaches (Nectarines and similar hybrids)	0,05*
140040	Plums (Damson, greengage, mirabelle)	0,05*
140990	Others	0,05*
150000	(v) Berries & small fruit	0,05*
151000	(a) Table and wine grapes	0,05*
151010	Table grapes	0,05*
151020	Wine grapes	0,05*

152000	(b) Strawberries	0,05*
153000	(c) Cane fruit	0,05*
153010	Blackberries Dewberries	0,05*
153020	(Loganberries, Boysenberries, and cloudberrries)	0,05*
153030	Raspberries (Wineberries)	0,05*
153990	Others	0,05*
154000	(d) Other small fruit & berries	0,05*
154010	Blueberries (Bilberries cowberries (red bilberries))	0,05*
154020	Cranberries	0,05*
154030	Currants (red, black and white)	0,05*
154040	Gooseberries (Including hybrids with other ribes species)	0,05*
154050	Rose hips	0,05*
154060	Mulberries (arbutus berry)	0,05*
154070	Azarole (mediteranean medlar) Elderberries (Black chokeberry (appleberry), mountain ash, azarole, buckthorn (sea shallowthorn), hawthorn, service berries, and other treeberries)	0,05*
154080	Others	0,05*
154990	Others	0,05*
160000	(vi) Miscellaneous fruit	
161000	(a) Edible peel	
161010	Dates	0,05*
161020	Figs	0,05*
161030	Table olives	0,1*
161040	Kumquats (Marumi kumquats, nagami kumquats)	0,05*
161050	Carambola (Bilimbi)	0,05*
161060	Persimmon	0,05*
161070	Jambolan (java plum) (Java apple (water apple), pomerac, rose apple, Brazilian cherry (grumichama), Surinam cherry)	0,05*
161990	Others	0,05*
162000	(b) Inedible peel, small	0,05*
162010	Kiwi	0,05*
162020	Lychee (Litchi) (Pulasan, rambutan (hairy litchi))	0,05*
162030	Passion fruit	0,05*
162040	Prickly pear (cactus fruit)	0,05*
162050	Star apple	0,05*
162060	American persimmon (Virginia kaki) (Black sapote, white sapote, green sapote, canistel (yellow sapote), and mammey sapote)	0,05*
162990	Others	0,05*
163000	(c) Inedible peel, large	0,05*
163010	Avocados	0,05*

163020	Bananas (Dwarf banana, plantain, apple banana)	0,05*	231020	Peppers (Chilli peppers)	0,05*
163030	Mangoes	0,05*	231030	Aubergines (egg plants) (Pepino)	0,05*
163040	Papaya	0,05*	231040	Okra, lady s fingers	0,05*
163050	Pomegranate	0,05*	231990	Others	0,05*
163060	Cherimoya (Custard apple, sugar apple (sweetsop), llama and other medium sized Annonaceae)	0,05*	232000	(b) Cucurbits - edible peel	0,05*
163070	Guava	0,05*	232010	Cucumbers	0,05*
163080	Pineapples	0,05*	232020	Gherkins	0,05*
163090	Bread fruit (Jackfruit)	0,05*	232030	Courgettes (Summer squash, marrow (patisson))	0,05*
163100	Durian	0,05*	232990	Others	0,05*
163110	Soursop (guanabana)	0,05*	233000	(c) Cucurbits-inedible peel	0,05*
163990	Others	0,05*	233010	Melons (Kiwano) Pumpkins (Winter squash)	0,05*
200000	2. VEGETABLES FRESH OR FROZEN		233020	Watermelons	0,05*
210000	(i) Root and tuber vegetables	0,05*	233990	Others	0,05*
211000	(a) Potatoes	0,05*	234000	(d) Sweet corn	0,05*
212000	(b) Tropical root and tuber vegetables	0,05*	239000	(e) Other fruiting vegetables	0,05*
212010	Cassava (Dasheen, eddoe (Japanese taro), tannia)	0,05*	240000	(iv) Brassica vegetables	0,05*
212020	Sweet potatoes	0,05*	241000	(a) Flowering brassica	0,05*
212030	Yams (Potato bean (yam bean), Mexican yam bean)	0,05*	241010	Broccoli (Calabrese, Chinese broccoli, Broccoli raab)	0,05*
212040	Arrowroot	0,05*	241020	Cauliflower	0,05*
212990	Others	0,05*	241990	Others	0,05*
213000	(c) Other root and tuber vegetables except sugar beet	0,05*	242000	(b) Head brassica	0,05*
213010	Beetroot	0,05*	242010	Brussels sprouts	0,05*
213020	Carrots	0,05*	242020	Head cabbage (Pointed head cabbage, red cabbage, savoy cabbage, white cabbage)	0,05*
213030	Celeriac	0,05*	242990	Others	0,05*
213040	Horseradish	0,05*	243000	(c) Leafy brassica	0,05*
213050	Jerusalem artichokes	0,05*	243010	Chinese cabbage (Indian (Chinese) mustard, pak choi, Chinese flat cabbage (tai goo choi), peking cabbage (pe-tsai), cow cabbage)	0,05*
213060	Parsnips	0,05*	243020	Kale (Borecole (curly kale), collards)	0,05*
213070	Parsley root	0,05*	243990	Others ()	0,05*
213080	Radishes (Black radish, Japanese radish, small radish and similar varieties)	0,05*	244000	(d) Kohlrabi	0,05*
213090	Salsify (Scorzonera, Spanish salsify (Spanish oysterplant))	0,05*	250000	(v) Leaf vegetables & fresh herbs	0,05*
213100	Swedes	0,05*	251000	(a) Lettuce and other salad plants including Brassicacea	0,05*
213110	Turnips	0,05*	251010	Lamb´s lettuce (Italian cornsalad)	0,05*
213990	Others	0,05*	251020	Lettuce (Head lettuce, lollo rosso (cutting lettuce), iceberg lettuce, romaine (cos) lettuce)	0,05*
220000	(ii) Bulb vegetables	0,05*	251030	Scarole (broad-leaf endive) (Wild chicory, red-leaved chicory, radicchio, curld leave endive, sugar loaf)	0,05*
220010	Garlic	0,05*	251040	Cress	0,05*
220020	Onions (Silverskin onions)	0,05*	251050	Land cress	0,05*
220030	Shallots	0,05*	251060	Rocket, Rucola (Wild rocket)	0,05*
220040	Spring onions (Welsh onion and similar varieties)	0,05*			
220990	Others	0,05*			
230000	(iii) Fruiting vegetables	0,05*			
231000	(a) Solanacea	0,05*			
231010	Tomatoes (Cherry tomatoes,)	0,05*			

251070	Red mustard	0,05*	270040	Fennel	0,05*
251080	Leaves and sprouts of Brassica spp (Mizuna)	0,05*	270050	Globe artichokes	0,05*
251990	Others	0,05*	270060	Leek	0,05*
252000	(b) Spinach & similar (leaves)	0,05*	270070	Rhubarb	0,05*
252010	Spinach (New Zealand spinach, turnip greens (turnip tops))	0,05*	270080	Bamboo shoots	0,05*
252020	Purslane (Winter purslane (miner's lettuce), garden purslane, common purslane, sorrel, glasswort)	0,05*	270090	Palm hearts	0,05*
252030	Beet leaves (chard) (Leaves of beetroot)	0,05*	270990	Others	0,05*
252990	Others	0,05*	280000	(viii) Fungi	
253000	(c) Vine leaves (grape leaves)	0,05*	280010	Cultivated (Common mushroom, Oyster mushroom, Shi-take)	10
254000	(d) Water cress	0,05*	280020	Wild (Chanterelle, Truffle, Morel,)	0,05*
255000	(e) Witloof	0,05*	280990	Others	0,05*
256000	(f) Herbs	0,05*	290000	(ix). Sea weeds	0,05*
256010	Chervil	0,05*	300000	3. PULSES, DRY	0,05*
256020	Chives	0,05*	300010	Beans (Broad beans, navy beans, flageolets, jack beans, lima beans, field beans, cowpeas)	0,05*
256030	Celery leaves (fennel leaves, Coriander leaves, dill leaves, Caraway leaves, lovage, angelica, sweet cicely and other Apiacea)	0,05*	300020	Lentils	0,05*
256040	Parsley	0,05*	300030	Peas (Chickpeas, field peas, chickling vetch)	0,05*
256050	Sage (Winter savory, summer savory,)	0,05*	300040	Lupins	0,05*
256060	Rosemary	0,05*	300990	Others	0,05*
256070	Thyme (marjoram, oregano)	0,05*	400000	4. OILSEEDS AND OILFRUITS	0,1*
256080	Basil (Balm leaves, mint, peppermint)	0,05*	401000	(i) Oilseeds	0,1*
256090	Bay leaves (laurel)	0,05*	401010	Linseed	7
256100	Tarragon (Hyssop)	0,05*	401020	Peanuts	0,1*
256990	Others	0,05*	401030	Poppy seed	0,1*
260000	(vi) Legume vegetables (fresh)	0,05*	401040	Sesame seed	0,1*
260010	Beans (with pods) (Green bean (french beans, snap beans), scarlet runner bean, slicing bean, yardlong beans)	0,05*	401050	Sunflower seed	0,1*
260020	Beans (without pods) (Broad beans, Flageolets, jack bean, lima bean, cowpea)	0,05*	401060	Rape seed (Bird rapeseed, turnip rape)	7
260030	Peas (with pods) (Mangetout (sugar peas))	0,05*	401070	Soya bean	0,1*
260040	Peas (without pods) (Garden pea, green pea, chickpea)	0,05*	401080	Mustard seed	0,1*
260050	Lentils	0,05*	401090	Cotton seed	0,1*
260990	Others	0,05*	401100	Pumpkin seeds	0,1*
270000	(vii) Stem vegetables (fresh)	0,05*	401110	Safflower	0,1*
270010	Asparagus	0,05*	401120	Borage	0,1*
270020	Cardoons	0,05*	401130	Gold of pleasure	0,1*
270030	Celery	0,05*	401140	Hempseed	0,1*
			401150	Castor bean	0,1*
			401990	Others	0,1*
			402000	(ii) Oilfruits	0,1*
			402010	Olives for oil production	0,1*
			402020	Palm nuts (palmoil kernels)	0,1*
			402030	Palmfruit	0,1*
			402040	Kapok	0,1*
			402990	Others	0,1*
			500000	5. CEREALS	
			500010	Barley	2
			500020	Buckwheat	0,05*
			500030	Maize	0,05*
			500040	Millet (Foxtail millet, teff)	0,05*

500050	Oats	5	820050	Juniper berries	0,1*
500060	Rice	0,05*	820060	Pepper, black and white (Long pepper, pink pepper)	0,1*
500070	Rye	2	820070	Vanilla pods	0,1*
500080	Sorghum	0,05*	820080	Tamarind	0,1*
500090	Wheat (Spelt Triticale)	2	820990	Others	0,1*
500990	Others	0,05*	830000	(iii) Bark	0,1*
600000	6. TEA, COFFEE, HERBAL INFUSIONS AND COCOA	0,1*	830010	Cinnamon (Cassia)	0,1*
610000	(i) Tea (dried leaves and stalks, fermented or otherwise of Camellia sinensis)	0,1*	830990	Others	0,1*
620000	(ii) Coffee beans	0,1*	840000	(iv) Roots or rhizome	0,1*
630000	(iii) Herbal infusions (dried)	0,1*	840010	Liquorice	0,1*
631000	(a) Flowers	0,1*	840020	Ginger	0,1*
631010	Camomille flowers	0,1*	840030	Turmeric (Curcuma)	0,1*
631020	Hybiscus flowers	0,1*	840040	Horse-radish	0,1*
631030	Rose petals	0,1*	840990	Others	0,1*
631040	Jasmine flowers	0,1*	850000	(v) Buds	0,1*
631050	Lime (linden)	0,1*	850010	Cloves	0,1*
631990	Others	0,1*	850020	Capers	0,1*
632000	(b) Leaves	0,1*	850990	Others	0,1*
632010	Strawberry leaves	0,1*	860000	(vi) Flower stigma	0,1*
632020	Rooibos leaves	0,1*	860010	Saffron	0,1*
632030	Maté	0,1*	860990	Others	0,1*
632990	Others	0,1*	870000	(vii) Aril	0,1*
633000	(c) Roots	0,1*	870010	Mace	0,1*
633010	Valerian root	0,1*	870990	Others	0,1*
633020	Ginseng root	0,1*	900000	9. SUGAR PLANTS	0,05*
633990	Others	0,1*	900010	Sugar beet (root)	0,05*
639000	(d) Other herbal infusions	0,1*	900020	Sugar cane	0,05*
640000	(iv) Cocoa (fermented beans)	0,1*	900030	Chicory roots	0,05*
650000	(v) Carob (st johns bread)	0,1*	900990	Others	0,05*
700000	7. HOPS (dried) , including hop pellets and unconcentrated powder	0,1*	1000000	10. PRODUCTS OF ANIMAL ORIGIN-TERRESTRIAL ANIMALS	
800000	8. SPICES	0,1*	1010000	(i) Meat, preparations of meat, offals, blood, animal fats fresh chilled or frozen, salted, in brine, dried or smoked or processed as flours or meals other processed products such as sausages and food preparations based on these	
810000	(i) Seeds	0,1*	1011000	(a) Swine	0,05*
810010	Anise	0,1*	1011010	Meat	0,05*
810020	Black caraway	0,1*	1011020	Fat free of lean meat	0,05*
810030	Celery seed (Lovage seed)	0,1*	1011030	Liver	0,05*
810040	Coriander seed	0,1*	1011040	Kidney	0,05*
810050	Cumin seed	0,1*	1011050	Edible offal	0,05*
810060	Dill seed	0,1*	1011990	Others	0,05*
810070	Fennel seed	0,1*	1012000	(b) Bovine	
810080	Fenugreek	0,1*	1012010	Meat	0,05*
810090	Nutmeg	0,1*	1012020	Fat	0,05*
810990	Others	0,1*	1012030	Liver	0,1*
820000	(ii) Fruits and berries	0,1*	1012040	Kidney	0,2*
820010	Allspice	0,1*	1012050	Edible offal	0,05*
820020	Anise pepper (Japan pepper)	0,1*	1012990	Others	0,05*
820030	Caraway	0,1*	1013000	(c) Sheep	0,05*
820040	Cardamom	0,1*			

1013010	Meat	0,05*
1013020	Fat	0,05*
1013030	Liver	0,05*
1013040	Kidney	0,05*
1013050	Edible offal	0,05*
1013990	Others	0,05*
1014000	(d) Goat	0,05*
1014010	Meat	0,05*
1014020	Fat	0,05*
1014030	Liver	0,05*
1014040	Kidney	0,05*
1014050	Edible offal	0,05*
1014990	Others	0,05*
1015000	(e) Horses, asses, mules or hinnies	0,05*
1015010	Meat	0,05*
1015020	Fat	0,05*
1015030	Liver	0,05*
1015040	Kidney	0,05*
1015050	Edible offal	0,05*
1015990	Others	0,05*
1016000	(f) Poultry -chicken, geese, duck, turkey and Guinea fowl-, ostrich, pigeon	0,05*
1016010	Meat	0,05*
1016020	Fat	0,05*
1016030	Liver	0,05*
1016040	Kidney	0,05*
1016050	Edible offal	0,05*
1016990	Others	0,05*
1017000	(g) Other farm animals (Rabbit, Kangaroo)	0,05*
1017010	Meat	0,05*
1017020	Fat	0,05*
1017030	Liver	0,05*
1017040	Kidney	0,05*
1017050	Edible offal	0,05*
1017990	Others	0,05*
1020000	(ii) Milk and cream, not concentrated, nor containing added sugar or sweetening matter, butter and other fats derived from milk, cheese and curd	0,05*
1020010	Cattle	0,05*
1020020	Sheep	0,05*
1020030	Goat	0,05*
1020040	Horse	0,05*
1020990	Others	0,05*
1030000	(iii) Birds eggs, fresh preserved or cooked Shelled eggs and egg yolks fresh, dried, cooked by steaming or boiling in water, moulded, frozen or otherwise preserved whether or not containing added sugar or sweetening matter	0,05*
1030010	Chicken	0,05*

1030020	Duck	0,05*
1030030	Goose	0,05*
1030040	Quail	0,05*
1030990	Others	0,05*
1040000	(iv) Honey (Royal jelly, pollen)	
1050000	(v) Amphibians and reptiles (Frog legs, crocodiles)	
1060000	(vi) Snails	
1070000	(vii) Other terrestrial animal products	

Pesticide residues and maximum residue levels (mg/kg)

(*) Indicates lower limit of analytical determination

APPENDIX E – PESTICIDE RESIDUES INTAKE MODEL (PRIMO)

Chlormequat			
Status of the active substance:	Included	Code no.	-
LOQ (mg/kg bw):	0.05	proposed LOQ:	
Toxicological end points			
ADI (mg/kg bw/day):	0.031	ARfD (mg/kg bw):	0.07
Source of ADI:	EFSA	Source of ARfD:	EFSA
Year of evaluation:	2009	Year of evaluation:	2009

Explain choice of toxicological reference values.

The risk assessment has been performed on the basis of the MRLs collected from Member States in April 2006. For each pesticide/commodity the highest national MRL was identified (proposed temporary MRL = pTMRL). The pTMRLs have been submitted to EFSA in September 2006.

Chronic risk assessment - refined calculations

		TMDI (range) in % of ADI minimum - maximum							
		6 77							
		No of diets exceeding ADI:							
Highest calculated TMDI values in % of ADI		Highest contributor to MS diet (in % of ADI)		2nd contributor to MS diet (in % of ADI)		3rd contributor to MS diet (in % of ADI)		pTMRLs at LOQ (in % of ADI)	
MS Diet		Commodity / group of commodities		Commodity / group of commodities		Commodity / group of commodities			
76.6	DK child	35.5	Wheat	28.5	Rye	6.4	Oats	4.5	
65.3	WHO Cluster diet B	55.1	Wheat	1.8	Barley	0.8	Cultivated fungi	5.1	
55.1	WHO cluster diet E	25.4	Wheat	13.4	Rape seed	5.2	Barley	3.3	
51.1	WHO cluster diet D	42.0	Wheat	2.6	Rye	1.4	Barley	3.1	
47.8	NL child	30.6	Wheat	4.7	Milk and cream,	4.0	Cultivated fungi	9.5	
45.9	IT kids/toddler	42.9	Wheat	1.3	Cultivated fungi	0.2	Other cereal	1.5	
45.8	DE child	26.5	Wheat	5.1	Rye	3.3	Oats	7.5	
45.5	WHO Cluster diet F	23.2	Wheat	7.0	Rape seed	4.9	Rye	2.8	
43.2	IE adult	14.8	Wheat	8.0	Barley	7.6	Cultivated fungi	5.0	
37.7	UK Toddler	25.3	Wheat	3.7	Sugar beet (root)	3.3	Milk and cream,	9.4	
34.3	ES child	28.6	Wheat	2.0	Milk and cream,	0.7	Cultivated fungi	4.4	
31.9	UK Infant	16.9	Wheat	6.2	Milk and cream,	4.1	Oats	10.4	
30.6	WHO regional European diet	19.1	Wheat	2.7	Rape seed	2.2	Cultivated fungi	3.4	
29.7	PT General population	25.3	Wheat	0.9	Rye	0.9	Potatoes	2.4	
29.7	IT adult	26.7	Wheat	1.6	Cultivated fungi	0.2	Tomatoes	1.2	
27.3	SE general population 90th percentile	20.7	Wheat	2.0	Milk and cream,	1.9	Rye	4.6	
27.2	FR toddler	16.9	Wheat	6.4	Milk and cream,	0.8	Potatoes	10.1	
24.0	FR all population	21.2	Wheat	0.6	Wine grapes	0.4	Milk and cream,	2.2	
23.3	ES adult	15.1	Wheat	3.2	Barley	2.1	Cultivated fungi	2.4	
23.0	DK adult	13.0	Wheat	4.4	Rye	1.9	Oats	2.2	
22.8	NL general	13.4	Wheat	2.6	Cultivated fungi	2.4	Barley	3.1	
20.8	UK vegetarian	13.2	Wheat	4.1	Cultivated fungi	0.8	Oats	2.5	
17.8	LT adult	6.9	Rye	6.8	Wheat	1.5	Oats	2.2	
15.6	UK Adult	10.8	Wheat	2.0	Cultivated fungi	0.6	Sugar beet (root)	2.3	
14.3	FI adult	6.3	Wheat	4.4	Rye	1.4	Oats	1.9	
12.4	FR infant	5.4	Wheat	4.2	Milk and cream,	0.7	Potatoes	6.9	
5.7	PL general population	4.1	Cultivated fungi	0.6	Potatoes	0.3	Apples	1.5	

Conclusion:
The estimated Theoretical Maximum Daily Intakes (TMDI), based on pTMRLs were below the ADI. A long-term intake of residues of Chlormequat is unlikely to present a public health concern.

Acute risk assessment /children - refined calculations

Acute risk assessment / adults / general population - refined calculations

The acute risk assessment is based on the ARfD.

For each commodity the calculation is based on the highest reported MS consumption per kg bw and the corresponding unit weight from the MS with the critical consumption. If no data on the unit weight was available from that MS an average European unit weight was used for the IESTI calculation.

In the **IESTI 1** calculation, the variability factors were 10, 7 or 5 (according to JMPR manual 2002), for lettuce a variability factor of 5 was used.

In the **IESTI 2** calculations, the variability factors of 10 and 7 were replaced by 5. For lettuce the calculation was performed with a variability factor of 3.

Threshold MRL is the calculated residue level which would leads to an exposure equivalent to 100 % of the ARfD.

Unprocessed commodities	No of commodities for which ARfD/ADI is exceeded (IESTI 1):			No of commodities for which ARfD/ADI is exceeded (IESTI 2):			No of commodities for which ARfD/ADI is exceeded (IESTI 1):			No of commodities for which ARfD/ADI is exceeded (IESTI 2):					
	IESTI 1		*)	IESTI 2		*)	IESTI 1		*)	IESTI 2		*)			
	Highest % of ARfD/ADI	Commodities	pTMRL/ threshold MRL (mg/kg)	Highest % of ARfD/ADI	Commodities	pTMRL/ threshold MRL (mg/kg)	Highest % of ARfD/ADI	Commodities	pTMRL/ threshold MRL (mg/kg)	Highest % of ARfD/ADI	Commodities	pTMRL/ threshold MRL (mg/kg)			
	13.0	Pears	0.1 / -	9.4	Pears	0.1 / -	3.1	Pears	0.1 / -	2.3	Pears	0.1 / -			
No of critical MRLs (IESTI 1)				---				No of critical MRLs (IESTI 2)				---			

Processed commodities	No of commodities for which ARfD/ADI is exceeded:			No of commodities for which ARfD/ADI is exceeded:		
			***)			***)
	Highest % of ARfD/ADI	Processed commodities	pTMRL/ threshold MRL (mg/kg)	Highest % of ARfD/ADI	Processed commodities	pTMRL/ threshold MRL (mg/kg)

*) The results of the IESTI calculations are reported for at least 5 commodities. If the ARfD is exceeded for more than 5 commodities, all IESTI values > 90% of ARfD are reported.

**) pTMRL: provisional temporary MRL

***) pTMRL: provisional temporary MRL for unprocessed commodity

Conclusion:

For Chlormequat IESTI 1 and IESTI 2 were calculated for food commodities for which pTMRLs were submitted and for which consumption data are available. No exceedance of the ARfD/ADI was identified for any unprocessed commodity.

For processed commodities, no exceedance of the ARfD/ADI was identified.

GLOSSARY / ABBREVIATIONS

ADI	Acceptable Daily Intake
ARfD	Acute Reference Dose
BBCH	Federal Biological Research Centre for Agriculture and Forestry (Germany)
EC	European Community
EFSA	European Food Safety Authority
EMS	Evaluating Member State
EU	European Union
HR	Highest Residue
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LOQ	Limit Of Quantification
MRL	Maximum Residue Limit.
PRIMo	Pesticide Residues Intake Model
RMS	Rapporteur Member State
STMR	Supervised Trials Median Residue