Review of the existing MRLs for methiocarb

Competent Authority Draft Reasoned Opinion

- Prepared under Article 12 of Regulation (EC) No 396/2005
- Reference Number: COP 2021/00529

June 2022

Contents

Summary

This assessment is a draft only and outlines proposed recommendations for the MRLs for the active substance methiocarb.

According to Article 12 of Regulation (EC) No 396/2005,[1] HSE as a competent authority has reviewed the Maximum Residue Levels (MRLs) currently established in Great Britain (GB) for the pesticide active substance methiocarb. This review of the MRLs has been undertaken by HSE under the GB regulatory regime following the UK leaving the EU. It was required following the earlier non-approval decision for the active substance methiocarb under the EU plant protection product regulatory regime (Regulation (EC) No 1107/2009),[2] and the subsequent withdrawal of all plant protection authorisations in GB. This EU non-approval decision came into force while the UK was still an EU Member State and was therefore retained in the national regulatory regime after the UK's departure from the EU.

Based on the review of the MRLs, HSE prepared a Reasoned Opinion (RO). HSE took into account the assessment report and EFSA Conclusion prepared under Regulation (EC) No 1107/2009 for the renewal of the approval of the active substance (the renewal assessment).

Methiocarb does not meet the requirements to be exempt from MRLs and therefore it is not suitable for inclusion in Part 4 (active substances not subject to MRLs) of the GB MRL Statutory Register.

Sufficiently validated analytical methods for the determination of methiocarb, methiocarb sulfoxide and methiocarb sulfone in plants and animals are available to enforce MRLs at an LOQ of 0.01 mg/kg.

Toxicological reference values were established in the renewal assessment: an ADI of 0.00025 mg/kg bw/day and an ARfD of 0.0005 mg/kg bw were established for methiocarb.

For the metabolite methiocarb sulfoxide, there is evidence that this metabolite is more toxic than methiocarb. Toxicological reference values were not established for this

[1] Retained Regulation (EC) No 396/2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin (as it applies in Great Britain, pursuant to the European Union (Withdrawal) Act 2018 and European Union (Withdrawal Agreement Act 2020). Great Britain ("GB") refers to England, Scotland and Wales. All references to this regulation are the retained regulation as it applies in GB.

[2] EU Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market. All references to this regulation are the EU regulation as it applied to the UK as an EU MS.

metabolite as the risk assessment is unable to demonstrate that the necessary requirements are satisfied.

The renewal assessment considered plant and animal metabolism data, processing studies, rotational crop data, residue trials and animal feeding studies: several data gaps within the residues assessment were identified.

In the renewal assessment, robust residue definitions for products of plant origin could not be established: the residue definitions for plants for both risk assessment and enforcement were only provisional. With regards to the residue definitions for enforcement, HSE recommends retaining the current definitions within the GB MRL Statutory Register:

- Methiocarb (sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb)

For livestock, the renewal assessment did not make any recommendations for the residue definitions. HSE recommends the current RD-Enf in the GB MRL Statutory Register is retained:

- Methiocarb (sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb)

The data provided for the renewal assessment are not sufficient to establish robust processing factors for methiocarb. At this time Part 6 of the GB MRL Statutory Register has not been established.

Proposed Recommendations

Based on the risk assessment conducted in the renewal assessment, HSE concludes that harmful effects on human health cannot be excluded for residues of methiocarb occurring in food. For the metabolite methiocarb sulfoxide, there is evidence that this metabolite is more toxic than methiocarb, however, the risk assessment was unable to demonstrate the necessary requirements were satisfied for this metabolite and no toxicological reference values could be established. This conclusion applies to all the current GB MRLs in the Statutory Register. As the required level of protection has not been met, HSE proposes that all MRLs are set at the limit of quantification.

The MRLs proposed by HSE are outlined in Table 8.1.

The MRLs should be established on the basis of the following residue definitions:

The residue definition for enforcement (RD-Enf) in plants:

- Sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb

The residue definition for enforcement (RD-Enf) in animals:

- Sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb

Notification of the proposed MRLs

To meet the UK's international trade obligations, the measures have been notified to the World Trade Organization (WTO). The WTO/SPS notification can be found at the following link and searching for methiocarb and United Kingdom as the notifying member:

Home - ePing SPS&TBT platform (epingalert.org)

- **There may be a delay between publication of this draft RO and the notification appearing in the Sanitary and Phytosanitary Information Management System**

- **The notification includes the proposed date of adoption/publication and the proposed date of entry in force of the new MRLs.**

Background

Article 12 of Regulation (EC) No 396/2005 requires the Competent Authority to undertake a review of the GB Maximum Residue Levels (MRLs).

A non-approval decision,[3] was delivered for methiocarb on 27 September 2019 and all plant protection product authorisations in GB have been withdrawn. HSE therefore initiated a review of the current MRLs taking into account the assessment report and EFSA Conclusion prepared under Regulation (EC) No 1107/2009 for the renewal of the approval of the active substance (the renewal assessment). As outlined in Article 12 (3) of Regulation (EC) No 396/2005, the following points have been considered within this review:

- The existing MRLs for methiocarb set out in Part 2 or 3 of the GB MRL Statutory Register
- The necessity of setting a new MRL for methiocarb, or its inclusion in Part 4 of the MRLs register
- Specific processing factors as referred to in Article 20(2) that may be needed for methiocarb
- MRLs which the competent authority may consider including in Part 2 or 3 of the MRLs register and those MRLs related to methiocarb which may be deleted

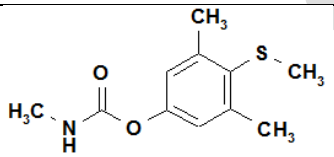
This review is the basis of HSE's draft reasoned opinion: HSE recommends that all the MRLs for methiocarb are lowered to the limit of quantification.

[3] Commission Implementing Regulation (EU) 2019/1606 of 27 September 2019 concerning the non-renewal of the approval of the active substance methiocarb, in accordance with Regulation (EC) No 1107/2009 of the European Parliament and of the Council concerning the placing of plant protection products on the market, and amending the Annex to Commission Implementing Regulation (EU) No 540/2011. The non-approval decision adopted when the UK was an EU MS.

The active substance and its use pattern

Information on the active substance methiocarb is outlined in Table 0.1.

Table 0.1 Information on the active substance

Common name (ISO)	Methiocarb
Chemical name (IUPAC)	4-methylthio-3,5-xylyl methylcarbamate
CAS number	2032-65-7
Structural formula	$C_{11}H_{15}NO_2S$
Molecular formula	
Molecular mass	225.3 g/mol

Methiocarb is not an approved active substance in GB and all plant protection product authorisations have been withdrawn.

A Renewal Assessment Report (RAR) (UK, 2017, revised 2018) and an EFSA Conclusion on the peer review of the renewal assessment (EFSA, 2018) are available.

MRLs are established for methiocarb in Part 3a of the GB MRL Statutory Register.

Methiocarb is an insecticide and bird repellent. Carbamate insecticides block the action of acetyl-cholinesterase at synaptic junctions thus killing by inducing lethal disruption of nerve function when ingested/in contact with target invertebrate pests. The bird repellent activity of methiocarb is due to the fact that birds find treated seeds an unattractive food source.

The following Codex MRLs (CXLs) are available for methiocarb (Codex Pesticide Residues in food online database).

Table 0.2 CXLs for methiocarb

Commodity	**CXL (mg/kg)**	**Comments**	**Year of adoption**
Artichoke, globe	0.05*	The CXLs are not recommended for adoption as harmful effects on human health cannot be excluded for	2006
Barley	0.05		2006
Barley straw and fodder, dry	0.05		2006
Brussels sprouts	0.05*		2006

Commodity	CXL (mg/kg)	Comments	Year of adoption
Cabbages, head	0.1	residues of methiocarb occurring in food	2006
Cauliflower	0.1		2006
Hazelnuts	0.05*		2006
Leek	0.5		2006
Lettuce, head	0.05*		2006
Maize	0.05*		2006
Melons, except watermelon	0.2		2006
Onion, bulb	0.5		2006
Pea hay or pea fodder (dry)	0.5		2006
Peas (dry)	0.1		2006
Peas (pods and succulent=immature seeds)	0.1		2006
Peppers, sweet (including pimento or pimiento)	2		2006
Potato	0.05*		2006
Rape seed	0.05*		2006
Spices, fruits and berries	0.07		2011
Spices, roots and rhizomes	0.1		2005
Strawberry	1		2003
Sugar beet	0.05*		2006
Sunflower seed	0.05*		2006
Wheat	0.05*		2006
Wheat straw and fodder, dry	0.05		2006

* denotes an MRL at the limit of quantification/ limit of determination

The CXL database is available at the following link:

http://www.fao.org/fao-who-codexalimentarius/codex-texts/dbs/pestres/en/

Assessment

1 Methods of Analysis

1.1 Methods for enforcement and monitoring of residues in food of plant origin

The current residue definition for enforcement is:

- Methiocarb (sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb)

No changes to this residue definition are proposed as a result of this review.

An analytical method for the determination of methiocarb, methiocarb sulfoxide and sulfone in high oil commodities was considered in the renewal assessment. The method was validated at an LOQ of 0.01 mg/kg for each analyte. An ILV was available.

The JMPR (JMPR, 2005) has considered an LC-MS/MS method. This was validated at an LOQ of 0.01 mg/kg for all three analytes for high acid, high starch and high water commodities.

Enforcement of MRLs for products of plant origin at an LOQ of 0.03 mg/kg (sum of three analytes) has been adequately demonstrated.

No specific analytical methods are available for the difficult to analyse matrices. Therefore, the default uncertainty factors outlined as footnotes for Table 8.1 will be applied.

1.2 Methods for enforcement and monitoring of residues in food of animal origin

The current residue definition for enforcement is:

- Methiocarb (sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb)

No changes to this residue definition are proposed as a result of this review.

An analytical method for the determination of all three analytes in animal commodities (meat, fat, liver, kidney, milk and eggs) was considered for the renewal of approval of the

active substance. The LC-MS/MS method was validated with an LOQ of 0.01 mg/kg for each analyte. An ILV was available.

Enforcement of MRLs for products of animal origin at an LOQ of 0.03 mg/kg (sum of all three analytes) has been demonstrated.

2 Mammalian toxicology

The toxicological end points established in the renewal assessment are summarised in Tables 2.1.

Table 2.1 Overview of the toxicological reference values for methiocarb

TRVs	Source	Year	Value	Study relied upon	Safety factor
ADI	EFSA Conclusion	2018	0.00025	Dog, 90-day	1000 (a)
ARfD	EFSA Conclusion	2018	0.00050	Rat, Development toxicity	1000 (a)

(a) An additional factor of 10 was added to the standard uncertainty factor of 100 to take into account the lack of a DNT study and the likely higher sensitivity to AChE inhibition of pups compared to adults.

As outlined in the EFSA Conclusion, the genotoxic potential of methiocarb was extensively discussed. A data gap was set to provide additional data to reduce the uncertainty with respect to the genotoxicity of methiocarb. This issue would need to be reconsidered in order to establish substantive MRLs for methiocarb.

For the metabolite methiocarb sulfoxide (M01), the risk assessment indicated that this metabolite was of a higher toxicity than methiocarb. No study on genotoxicity was provided. M01 was found as a rat metabolite but it was not a major metabolite, and hence is not covered by the parent toxicity. A QSAR analysis using DEREK Nexus. v.2.2.1 was performed by the RMS and the analysis revealed no additional alerts of concern, as to those that were already obtained for the parent compound methiocarb. However, the alerts for chromosome aberration confirmed the positive results observed in vitro with the parent compound. The risk assessment demonstrates that the necessary requirements have not been met for this metabolite and no toxicological reference values were established.

3 Residues in Plants

The renewal assessment should be consulted for all the available data to support residues in plants.

The consideration of the inclusion in Part 4 of the GB MRL Statutory Register

Methiocarb does not meet the requirements to be exempt from MRLs:

- Active substances approved as a basic substance
- Active substances listed Part 1 of the GB MRL Statutory Register
- Active substances with no identified hazards
- The consumer exposure associated with the use of the active substance as a PPP is negligible compared to other sources/natural background exposure
- The method of application of the PPP will lead to no consumer exposure

Therefore, HSE does not recommend that methiocarb is included in Part 4 (active substances not subject to MRLs) of the GB MRL Statutory Register.

All authorisations in GB have been withdrawn on the basis of the non-approval decision for methiocarb. As outlined in section 7 of this Reasoned Opinion, the renewal assessment establishes that harmful effects for human health cannot be excluded and therefore the required level of protection has not been met.

It is important to note that for the renewal assessment, the representative use was a seed treatment on maize, with residues of methiocarb and all metabolites < 0.01 mg/kg. Provided residues are below the LOQ, harmful effects for human health are unlikely. HSE recommends that all MRLs for products of plant origin are set at the limit of quantification. Therefore, no additional residues data are presented in this Reasoned Opinion. The following is a summary only of the available information from the renewal assessment:

Residues in primary crops

The metabolism of methiocarb in fruits (apples) and cereals (rice) following foliar treatment, in leafy crops (lettuces) and fruits (tomatoes) following soil treatment and in rice foliage only and oilseeds and pulses (oilseed rape) following seed treatment was assessed in the renewal assessment. The metabolism data for apples, lettuces, tomatoes and rice were not compliant with the OECD guidance and are regarded as supportive information only. The metabolism data for oilseed rape was acceptable. Methiocarb and the

metabolites M01, M03, M04 and M05, and their conjugates, were the significant residues found in crops.

Residues in rotational crops

With respect to residues in rotational crops, all UK authorisations have been withdrawn and therefore no residues in crops grown in rotation in GB are expected.

In the renewal assessment it was concluded that accumulation of methiocarb and its metabolites M01, M03, M04 and M05 and M010 was not expected and therefore a consideration of residues that may arise in imported crops is not required.

Residues in processed commodities

The need for processing data was not triggered in the renewal assessment. Robust Pf for methiocarb cannot currently be established.

Data may be required to support any substantive MRLs.

Residue definitions for enforcement

Within the renewal assessment, a provisional residue definition for enforcement (RD-Enf) was proposed:

- Methiocarb and methiocarb sulfoxide (M01)

The RD-Enf is provisional as the risk assessment was unable to demonstrate that the necessary requirements are satisfied and consequently, toxicological reference values have not been established. Therefore, at this time it is not known if the residues should be summed or determined individual, although there is evidence that M01 is of a higher toxicity than methiocarb and would need to be assessed separately.

The current RD-Enf in the GB MRL Statutory Register is:

- Methiocarb (sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb)

M01 = Methiocarb sulfoxide

M02 = Methiocarb sulfone

This residue definition was established for the first approval.

Based on the available metabolism data, the sum of methiocarb and methiocarb sulfoxide may be sufficient as a marker for MRLs. Analytical methods are available to determine both methiocarb and methiocarb sulfoxide.

Methiocarb sulfone (M02) is not expected at significant levels in crops.

According to the JMPR assessment (JMPR, 1999) the available analytical methods either determine the sum of methiocarb, methiocarb sulfoxide and methiocarb sulfone, as methiocarb sulfone, or determine the three analytes individually.

Given the analytical methods available may determine the residue as methiocarb sulfone (M02), then this should be retained in the RD-Enf. However, the RD-Enf will need to be reconsidered in order to establish substantive MRLs.

Residue definitions for risk assessment

Within the renewal assessment, a provisional residue definition for risk assessment (RD-RA) was proposed:

1. Methiocarb
2. Methiocarb sulfoxide (M01) (a potency factor of 3 should be applied)
3. Sum of methiocarb phenol (M03), methiocarb sulfoxide phenol (M04) and methiocarb sulfone phenol (M05), free and conjugated

The RD-RA is provisional as the risk assessment was unable to demonstrate that the necessary requirements are satisfied and consequently, toxicological reference values have not been established. Therefore, at this time it is not known if the residues should be summed or determined individually, although there is evidence that M01 is of a higher toxicity than methiocarb and would need to be assessed separately.

The full details are outlined in the EFSA Conclusion.

As a result of this review no additional conclusions are made on a suitable residue definition for risk assessment. The provisional residue definition outlined in the EFSA Conclusion remains applicable for risk assessment in the absence of additional information. It should be noted that depending on the analytical method employed, residues of methiocarb and methiocarb sulfoxide may be determined as methiocarb sulfone. This issue would need to be fully addressed in order to establish any substantive MRLs.

4 Residues in livestock

The renewal assessment should be consulted for all the available data to support residues in livestock.

As outlined in Section 3, the residue definitions for plants are only provisional. It is therefore not known what specific residues will occur in animal feeds. Hence, it is not known what residues livestock will be exposed to and it not possible to undertake an accurate assessment of the livestock dietary burden.

Livestock metabolism data were assessed in the renewal assessment. The metabolism data for ruminants and poultry were not acceptable; the studies did not follow the OECD guidance and several deficiencies in the studies were noted. It is not possible to establish residue definitions for livestock. HSE recommends that all MRLs for products of plant origin are set at the limit of quantification.

Residue definitions for enforcement

Within the renewal assessment, residue definitions for risk assessment and enforcement were not recommended. This is because the livestock metabolism data were no sufficient.

The current RD-Enf in the GB MRL Statutory Register is:

- Methiocarb (sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb)

It is noted that this is the RD-Enf and RD-RA endorsed by the JMPR. Although the RD-RA for plants is only provisional, the available plant metabolism data indicate that livestock will be exposed to methiocarb and methiocarb sulfoxide. Therefore, a RD-Enf for livestock of parent only is likely to be inadequate. In addition, depending on the analytical method employed, residues of methiocarb and methiocarb sulfoxide may be determined as methiocarb sulfone. HSE recommends the current RD-Enf is therefore retained.

Residue definitions for risk assessment

As outlined above no residue definitions for livestock were established in the renewal assessment. In the absence of additional information, the current RD-Enf is applied for risk assessment. This would need to be fully addressed in order to establish any substantive MRLs.

5 Residues in honey

The potential for residues arising in honey is not relevant as there are no authorisations in GB. The MRL for honey should be set at the default LOQ MRL (for honey) of 0.05* mg/kg. This is based on a RD-Enf of methiocarb (sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb).

6 MRLs for products not covered in sections 3 and 4

This section is to cover MRLs that can be extrapolated to other products included in Part 1 of the GB MRL Statutory Register but are not covered in sections 3 and 4 of this review. Examples include MRLs for edible offals (other than liver and kidney) or MRLs to cover products derived from other species such as goat or equine.

The MRLs for methiocarb for all products of plant and animal origin are recommended to be set at the limit of quantification and therefore a consideration of the extrapolation of MRLs to additional products is not required.

7 Consumer risk assessment

7.1 Dietary Exposure

The following issues were identified in the renewal assessment that are relevant to consumer exposure:

- The animal metabolism studies were regarded as unreliable in the renewal assessment. A review of the animal metabolism studies demonstrates that they do not fully comply with the OECD guidance and it is difficult to conclude on the nature and magnitude of residues that may occur in animals. Updated details to fully justify the reliability of all the studies should be provided.

- It is not possible to establish residues definitions for risk assessment for plants and livestock. Consequently, it is not known what residues humans and livestock may be exposed to as a result of crops treated with methiocarb. The risk assessment is unable to demonstrate that the necessary requirements are satisfied.

- There is evidence that the metabolite methiocarb sulfoxide is more toxic than the parent. However, the risk assessment was unable to demonstrate the necessary requirements have been addressed and toxicological reference values were not established.

As outlined in the EFSA Conclusion, the genotoxic potential of methiocarb was also extensively discussed. A data gap was set to provide additional data to reduce the uncertainty with respect to the genotoxicity of methiocarb. This issue will need to be reconsidered in order to establish any substantive MRLs for methiocarb.

The full list of issues identified in the renewal assessment are available in the EFSA Conclusion.

For the renewal assessment the representative use considered was a seed treatment on maize. Residues of methiocarb and all metabolites were < 0.01 mg/kg. Provided residues are below 0.01 mg/kg harmful effects for human health are unlikely. Therefore, all MRLs should be set at the LOQ.

The outcome of the risk assessment for the renewal of methiocarb is directly relevant to all uses and hence all GB MRLs in the Statutory Register. Therefore, consumer intake estimations have not been performed.

Based on the risk assessment conducted in the renewal assessment, HSE concludes that harmful effects on human health cannot be excluded for residues of methiocarb occurring

in food. For the metabolite methiocarb sulfoxide, there is evidence that this metabolite is more toxic than methiocarb, however, the risk assessment was unable to demonstrate the necessary requirements were satisfied for this metabolite and no toxicological reference values could be established. Consequently, the required level of protection has not been met.

7.2 Other routes of exposure

As there are no authorisations in GB then exposure as a result of metabolites being present in drinking water/ground water is not of concern.

8 The draft conclusion of the competent authority

This assessment is a draft only and outlines proposed recommendations for the MRLs for the active substance methiocarb.

According to Article 12 of Regulation (EC) No 396/2005, HSE as a competent authority has reviewed the Maximum Residue Levels (MRLs) currently established in Great Britain (GB) for the pesticide active substance methiocarb. This review of the MRLs has been undertaken by HSE under the GB regulatory regime following the UK leaving the EU. It was required following the earlier non-approval decision for the active substance methiocarb under the EU plant protection product regulatory regime (Regulation (EC) No 1107/2009), and the subsequent withdrawal of all plant protection authorisations in GB. This EU non-approval decision came into force while the UK was still an EU Member State and was therefore retained in the national regulatory regime after the UK's departure from the EU.

Based on the review of the MRLs, HSE prepared a Reasoned Opinion (RO). HSE took into account the assessment report and EFSA Conclusion prepared under Regulation (EC) No 1107/2009 for the renewal of the approval of the active substance (the renewal assessment).

Methiocarb does not meet the requirements to be exempt from MRLs and therefore it is not suitable for inclusion in Part 4 (active substances not subject to MRLs) of the GB MRL Statutory Register.

Sufficiently validated analytical methods for the determination of methiocarb, methiocarb sulfoxide and methiocarb sulfone in plants and animals are available to enforce MRLs at an LOQ of 0.01 mg/kg.

Toxicological reference values were established in the renewal assessment: an ADI of 0.00025 mg/kg bw/day and a ARfD of 0.0005 mg/kg bw were established for methiocarb.

For the metabolite methiocarb sulfoxide, there is evidence that this metabolite is more toxic than methiocarb. Toxicological reference values were not established for this metabolite as the risk assessment is unable to demonstrate that the necessary requirements are satisfied.

The renewal assessment considered plant and animal metabolism data, processing studies, rotational crop data, residue trials and animal feeding studies: several data gaps within the residues assessment were identified.

In the renewal assessment, robust residue definitions for products of plant origin could not be established: the residue definitions for plants for both risk assessment and enforcement were only provisional. With regards to the residue definitions for enforcement, HSE recommends retaining the current definitions within the GB MRL Statutory Register: methiocarb (sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb).

For livestock, the renewal assessment did not make any recommendations for the residue definitions. HSE recommends the current RD-Enf is retained.

The data provided for the renewal assessment are not sufficient to establish robust processing factors for methiocarb. At this time Part 6 of the GB MRL Statutory Register has not been established.

Proposed Recommendations

Based on the risk assessment conducted in the renewal assessment, HSE concludes that harmful effects on human health cannot be excluded for residues of methiocarb occurring in food. For the metabolite methiocarb sulfoxide, there is evidence that this metabolite is more toxic than methiocarb, however, the risk assessment was unable to demonstrate the necessary requirements were satisfied for this metabolite and no toxicological reference values could be established. This conclusion applies to all the current GB MRLs in the Statutory Register. As the required level of protection has not been met, HSE proposes that all MRLs are set at the limit of quantification.

The MRLs proposed by HSE are outlined in Table 8.1.

The MRLs should be established on the basis of the following residue definitions:

The residue definition for enforcement (RD-Enf) in plants:

- Sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb

The residue definition for enforcement (RD-Enf) in animals:

- Sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb

Notification of the proposed MRLs

To meet the UK's international trade obligations, the measures have been notified to the World Trade Organization (WTO). The WTO/SPS notification can be found at the following link and searching for methiocarb and United Kingdom as the notifying member:

Home - ePing SPS&TBT platform (epingalert.org)

- **There may be a delay between publication of this draft RO and the notification appearing in the Sanitary and Phytosanitary Information Management System**

- **The notification includes the proposed date of adoption/publication and the proposed date of entry in force of the new MRLs.**

Table 8.1 MRLs proposed by HSE

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
Enforcement residue definition for products of plant origin: Sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb			
0100000	**FRUITS, FRESH or FROZEN; TREE NUTS**	-	-
0110000	Citrus fruits	-	-
0110010	Grapefruits	0.1*	**0.03***
0110020	Oranges	0.1*	**0.03***
0110030	Lemons	0.2	**0.03***
0110040	Limes	0.2	**0.03***
0110050	Mandarins	0.2	**0.03***
0110990	Others - Citrus Fruit	0.2	**0.03***
0120000	Tree Nuts	-	-
0120010	Almonds	0.2	**0.03***
0120020	Brazil nuts	0.2	**0.03***
0120030	Cashew nuts	0.2	**0.03***
0120040	Chestnuts	0.2	**0.03***
0120050	Coconuts	0.2	**0.03***
0120060	Hazelnuts/cobnuts	0.2	**0.03***
0120070	Macadamias	0.2	**0.03***

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0120080	Pecans	0.2	**0.03***
0120090	Pine nut kernels	0.2	**0.03***
0120100	Pistachios	0.2	**0.03***
0120110	Walnuts	0.2	**0.03***
0120990	Others - Tree nuts	0.2	**0.03***
0130000	Pome fruits	-	-
0130010	Apples	0.1*	**0.03***
0130020	Pears	0.1*	**0.03***
0130030	Quinces	0.2	**0.03***
0130040	Medlars	0.2	**0.03***
0130050	Loquats/Japanese medlars	0.2	**0.03***
0130990	Others - Pome fruit	0.2	**0.03***
0140000	Stone fruits	-	-
0140010	Apricots	0.2	**0.03***
0140020	Cherries (sweet)	0.2	**0.03***
0140030	Peaches	0.2	**0.03***
0140040	Plums	0.2	**0.03***
0140990	Others - Stone fruit	0.2	**0.03***
0150000	Berries and small fruits	-	-

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0151000	Grapes	-	-
0151010	Table grapes	0.3	**0.03***
0151020	Wine grapes	0.3	**0.03***
0152000	Strawberries	-	-
0152000	Strawberries	1	**0.03***
0153000	Cane fruits	-	-
0153010	Blackberries	0.2	**0.03***
0153020	Dewberries	0.2	**0.03***
0153030	Raspberries (red and yellow)	0.2	**0.03***
0153990	Others - Cane fruit	0.2	**0.03***
0154000	Other small fruits and berries	-	-
0154010	Blueberries	0.2	**0.03***
0154020	Cranberries	0.2	**0.03***
0154030	Currants (black, red and white)	0.2	**0.03***
0154040	Gooseberries (green, red and yellow)	0.2	**0.03***
0154050	Rose hips	0.2	**0.03***

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0154060	Mulberries (black and white)	0.2	**0.03***
0154070	Azaroles/Mediterranean medlars	0.2	**0.03***
0154080	Elderberries	0.2	**0.03***
0154990	Others - Other small fruit and berries	0.2	**0.03***
0160000	Miscellaneous fruits with	-	-
0161000	Edible peel	-	-
0161010	Dates	0.2	**0.03***
0161020	Figs	0.2	**0.03***
0161030	Table olives	0.2	**0.03***
0161040	Kumquats	0.2	**0.03***
0161050	Carambolas	0.2	**0.03***
0161060	Kaki/Japanese persimmons	0.2	**0.03***
0161070	Jambuls/jambolans	0.2	**0.03***
0161990	Others - Edible peel	0.2	**0.03***
0162000	Inedible peel, small	-	-
0162010	Kiwi fruits (green, red, yellow)	0.2	**0.03***

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0162020	Litchis/lychees	0.2	**0.03***
0162030	Passionfruits/maracujas	0.2	**0.03***
0162040	Prickly pears/cactus fruits	0.2	**0.03***
0162050	Star apples/cainitos	0.2	**0.03***
0162060	American persimmons/Virginia kaki	0.2	**0.03***
0162990	Others - Inedible peel, small	0.2	**0.03***
0163000	Inedible peel, large	-	-
0163010	Avocados	0.2	**0.03***
0163020	Bananas	0.1*	**0.03***
0163030	Mangoes	0.1*	**0.03***
0163040	Papayas	0.2	**0.03***
0163050	Granate apples/pomegranates	0.2	**0.03***
0163060	Cherimoyas	0.2	**0.03***
0163070	Guavas	0.2	**0.03***
0163080	Pineapples	0.1*	**0.03***
0163090	Breadfruits	0.2	**0.03***

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0163100	Durians	0.2	**0.03***
0163110	Soursops/guanabanas	0.2	**0.03***
0163990	Others - Inedible peel, large	0.2	**0.03***
0200000	**VEGETABLES, FRESH or FROZEN**	-	-
0210000	Root and tuber vegetables	-	-
0211000	Potatoes	-	-
0211000	Potatoes	0.1*	**0.03***
0212000	Tropical root and tuber vegetables	-	-
0212010	Cassava roots/manioc	0.1*	**0.03***
0212020	Sweet potatoes	0.1*	**0.03***
0212030	Yams	0.1*	**0.03***
0212040	Arrowroots	0.1*	**0.03***
0212990	Others - Tropical root and tuber vegetables	0.1*	**0.03***
0213000	Other root and tuber vegetables except sugar beets	-	-

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0213010	Beetroots	0.1*	**0.03***
0213020	Carrots	0.1*	**0.03***
0213030	Celeriacs/turnip rooted celeries	0.1*	**0.03***
0213040	Horseradishes	0.1*	**0.03***
0213050	Jerusalem artichokes	0.1*	**0.03***
0213060	Parsnips	0.1*	**0.03***
0213070	Parsley roots/Hamburg roots parsley	0.1*	**0.03***
0213080	Radishes	0.1*	**0.03***
0213090	Salsifies	0.1*	**0.03***
0213100	Swedes/rutabagas	0.1*	**0.03***
0213110	Turnips	0.1*	**0.03***
0213990	Others - Other root and tuber vegetables except sugar beet	0.1*	**0.03***
0220000	Bulb vegetables	-	-
0220010	Garlic	0.5	**0.03***
0220020	Onions	0.1*	**0.03***
0220030	Shallots	0.5	**0.03***

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0220040	Spring onions/green onions and Welsh onions	0.5	**0.03***
0220990	Others - bulb vegetables	0.5	**0.03***
0230000	Fruiting vegetables	-	-
0231000	Solanaceae and Malvaceae	-	-
0231010	Tomatoes	0.2	**0.03***
0231020	Sweet peppers/bell peppers	0.2	**0.03***
0231030	Aubergines/eggplants	0.1*	**0.03***
0231040	Okra/lady's fingers	0.1*	**0.03***
0231990	Others - Solanacea	0.1*	**0.03***
0232000	Cucurbits with edible peel	-	-
0232010	Cucumbers	0.2	**0.03***
0232020	Gherkins	0.2	**0.03***
0232030	Courgettes	0.5	**0.03***
0232990	Others - Cucurbits-edible peel	0.2	**0.03***

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0233000	Cucurbits with inedible peel	-	-
0233010	Melons	0.5	**0.03***
0233020	Pumpkins	0.2	**0.03***
0233030	Watermelons	0.2	**0.03***
0233990	Others - Cucurbits - inedible peel	0.2	**0.03***
0234000	Sweet corn	-	-
0234000	Sweet corn	0.1*	**0.03***
0239000	Other fruiting vegetables	-	
0239000	Other fruiting vegetables	0.1*	**0.03***
0240000	Brassica vegetables (excluding brassica roots and brassica baby leaf crops)	-	-
0241000	Flowering brassica	-	-
0241010	Broccoli	0.1*	**0.03***
0241020	Cauliflowers	0.1*	**0.03***
0241990	Others - Flowering Brassicas	0.1*	**0.03***
0242000	Head brassica	-	

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0242010	Brussels sprouts	0.1*	**0.03***
0242020	Head cabbages	0.1*	**0.03***
0242990	Others - Head Brassicas	0.1*	**0.03***
0243000	Leafy brassica	-	-
0243010	Chinese cabbages/pe-tsai	0.1*	**0.03***
0243020	Kales	0.1*	**0.03***
0243990	Others - Leafy Brassicas	0.1*	**0.03***
0244000	Kohlrabies	-	-
0244000	Kohlrabies	0.1*	**0.03***
0250000	Leaf vegetables, herbs and edible flowers	-	-
0251000	Lettuces and salad plants	-	-
0251010	Lamb's lettuces/corn salads	1	**0.03***
0251020	Lettuces	1	**0.03***
0251030	Escaroles/broad-leaved endives	0.1*	**0.03***
0251040	Cresses and other sprouts and shoots	1	**0.03***

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0251050	Land cresses	1	**0.03***
0251060	Roman rocket/rucola	1	**0.03***
0251070	Red mustards	1	**0.03***
0251080	Baby leaf crops (including brassica species)	1	**0.03***
0251990	Others - Lettuce and other salad plants including brassica	1	**0.03***
0252000	Spinaches and similar leaves	-	-
0252010	Spinaches	0.1*	**0.03***
0252020	Purslanes	0.2	**0.03***
0252030	Chards/beet leaves	0.1*	**0.03***
0252990	Others - Spinach and similar (leaves)	1	**0.03***
0253000	Grape leaves and similar species	-	-
0253000	Grape leaves and similar species	1	**0.03***
0254000	Watercresses	-	-
0254000	Watercresses	1	**0.03***

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0255000	Witloofs/Belgian endives	-	-
0255000	Witloofs/Belgian endives	0.1*	**0.03***
0256000	Herbs and edible flowers	-	-
0256010	Chervil	1	**0.06***
0256020	Chives	1	**0.06***
0256030	Celery leaves	1	**0.06***
0256040	Parsley	1	**0.06***
0256050	Sage	1	**0.06***
0256060	Rosemary	1	**0.06***
0256070	Thyme	1	**0.06***
0256080	Basil and edible flowers	1	**0.06***
0256090	Laurel/bay leaves	1	**0.06***
0256100	Tarragon	1	**0.06***
0256990	Others - Herbs	1	**0.06***
0260000	Legume vegetables	-	-
0260010	Beans (with pods)	0.2	**0.03***
0260020	Beans (without pods)	0.1*	**0.03***
0260030	Peas (with pods)	0.2	**0.03***
0260040	Peas (without pods)	0.1*	**0.03***

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0260050	Lentils	0.1*	**0.03***
0260990	Others - Legume vegetables (fresh)	0.1*	**0.03***
0270000	Stem vegetables	-	-
0270010	Asparagus	0.1*	**0.03***
0270020	Cardoons	0.1*	**0.03***
0270030	Celeries	0.1*	**0.03***
0270040	Florence fennels	0.1*	**0.03***
0270050	Globe artichokes	0.1*	**0.03***
0270060	Leeks	0.2	**0.03***
0270070	Rhubarbs	0.1*	**0.03***
0270080	Bamboo shoots	0.1*	**0.03***
0270090	Palm hearts	0.1*	**0.03***
0270990	Others - Stem vegetables (fresh)	0.1*	**0.03***
0280000	Fungi, mosses and lichens	-	-
0280010	Cultivated fungi	0.1*	**0.03***
0280020	Wild fungi	0.1*	**0.03***
0280990	Mosses and lichens	0.1*	**0.03***

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0290000	Algae and prokaryotes organisms	-	-
0290000	Algae and prokaryotes organisms	0.1*	**0.03***
0300000	**PULSES, DRY**	-	-
0300010	Beans	0.1*	**0.03***
0300020	Lentils	0.1*	**0.03***
0300030	Peas	0.1*	**0.03***
0300040	Lupins/lupini beans	0.1*	**0.03***
0300990	Others - pulses	0.1*	**0.03***
0400000	**OILSEEDS AND OIL FRUITS**	-	-
0401000	Oilseeds	-	-
0401010	Linseeds	0.1*	**0.03***
0401020	Peanuts/groundnuts	0.1*	**0.03***
0401030	Poppy seeds	0.1*	**0.03***
0401040	Sesame seeds	0.1*	**0.03***
0401050	Sunflower seeds	0.1*	**0.03***
0401060	Rapeseeds/canola seeds	0.1*	**0.03***
0401070	Soyabeans	0.1*	**0.03***

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0401080	Mustard seeds	0.1*	**0.03***
0401090	Cotton seeds	0.1*	**0.03***
0401100	Pumpkin seeds	0.1*	**0.03***
0401110	Safflower seeds	0.1*	**0.03***
0401120	Borage seeds	0.1*	**0.03***
0401130	Gold of pleasure seeds	0.1*	**0.03***
0401140	Hemp seeds	0.1*	**0.03***
0401150	Castor beans	0.1*	**0.03***
0401990	Others - Oilseeds	0.1*	**0.03***
0402000	Oil fruits	-	-
0402010	Olives for oil production	0.2	**0.03***
0402020	Oil palms kernels	0.1*	**0.03***
0402030	Oil palms fruits	0.1*	**0.03***
0402040	Kapok	0.1*	**0.03***
0402990	Others - Oilfruits	0.1*	**0.03***
0500000	**CEREALS**	-	-
0500010	Barley	0.1*	**0.03***
0500020	Buckwheat and other pseudocereals	0.1*	**0.03***
0500030	Maize/corn	0.1*	**0.03***

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0500040	Common millet/proso millet	0.1*	**0.03***
0500050	Oat	0.1*	**0.03***
0500060	Rice	0.1*	**0.03***
0500070	Rye	0.1*	**0.03***
0500080	Sorghum	0.1*	**0.03***
0500090	Wheat	0.1*	**0.03***
0500990	Others - cereals	0.1*	**0.03***
0600000	**TEAS, COFFEE, HERBAL INFUSIONS, COCOA AND CAROBS**	-	-
0610000	Teas	-	-
0610000	Teas	0.1*	0.1*
0620000	Coffee beans		
0620000	Coffee beans	0.1*	0.1*
0630000	Herbal infusions from Dried product	-	-
0631000	Flowers	-	-
0631010	Chamomile	0.1*	0.1*
0631020	Hibiscus/roselle	0.1*	0.1*
0631030	Rose	0.1*	0.1*

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0631040	Jasmine	0.1*	0.1*
0631050	Lime/linden	0.1*	0.1*
0631990	Others - Flowers	0.1*	0.1*
0632000	Leaves and herbs	-	-
0632010	Strawberry	0.1*	0.1*
0632020	Rooibos	0.1*	0.1*
0632030	Mate	0.1*	0.1*
0632990	Others - Herbal infusions (leaves and herbs)	0.1*	0.1*
0633000	Roots		
0633010	Valerian	0.1*	0.1*
0633020	Ginseng	0.1*	0.1*
0633990	Others - Roots	0.1*	0.1*
0639000	Other herbal Infusions - Parts of the plant other than flowers, leaves and herbs, and roots	-	-
0639000	Any other parts of the plant	0.1*	0.1*
0640000	Cocoa beans	-	-

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0640000	Cocoa beans	0.1*	0.1*
0650000	Carobs/Saint John's breads	-	-
0650000	Carobs/Saint John's breads	0.1*	0.1*
0700000	**HOPS**	-	-
0700000	Hops	0.1*	0.1*
0800000	**SPICES**	-	-
0810000	Seed spices	-	-
0810010	Anise/aniseed	0.1*	0.1*
0810020	Black caraway/black cumin	0.1*	0.1*
0810030	Celery seed	0.1*	0.1*
0810040	Coriander seed	0.1*	0.1*
0810050	Cumin seed	0.1*	0.1*
0810060	Dill seed	0.1*	0.1*
0810070	Fennel seed	0.1*	0.1*
0810080	Fenugreek	0.1*	0.1*
0810090	Nutmeg	0.1*	0.1*
0810990	Others - Seeds	0.1*	0.1*

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0820000	Fruit spices	-	-
0820010	Allspice/pimento	0.1*	0.1*
0820020	Sichuan pepper	0.1*	0.1*
0820030	Caraway	0.1*	0.1*
0820040	Cardamom	0.1*	0.1*
0820050	Juniper berry	0.1*	0.1*
0820060	Peppercorn (black, green and white)	0.1*	0.1*
0820070	Vanilla	0.1*	0.1*
0820080	Tamarind	0.1*	0.1*
0820990	Others - Fruit spices	0.1*	0.1*
0830000	Bark spices	-	-
0830010	Cinnamon	0.1*	0.1*
0830990	Others - Bark	0.1*	0.1*
0840000	Root and rhizome spices	-	-
0840010	Liquorice	0.1*	0.1*
0840020	Ginger	0.1*	0.1*
0840030	Turmeric/curcuma	0.1*	0.1*
0840040	Horseradish	0.1*	0.1*

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
0840990	Others - Roots or rhizome	0.1*	0.1*
0850000	Bud spices	-	-
0850010	Cloves	0.1*	0.1*
0850020	Capers	0.1*	0.1*
0850990	Others - Buds	0.1*	0.1*
0860000	Flower pistil spices	-	-
0860010	Saffron	0.1*	0.1*
0860990	Others - Flower pistil spices	0.1*	0.1*
0870000	Aril spices	-	-
0870010	Mace	0.1*	0.1*
0870990	Others - Aril spices	0.1*	0.1*
0900000	**SUGAR PLANTS**	-	-
0900010	Sugar beet roots	0.1*	**0.03***
0900020	Sugar canes	0.1*	**0.03***
0900030	Chicory roots	0.1*	**0.03***
0900990	Others - Sugar plants	0.1*	**0.03***
Enforcement residue definition for products of animal origin: Sum of methiocarb and methiocarb sulfoxide and sulfone, expressed as methiocarb			

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
1000000	**PRODUCTS OF ANIMAL ORIGIN - TERRESTRIAL ANIMALS**	-	-
1010000	Commodities from	-	-
1011000	Swine	-	-
1011010	Muscle - swine	0.05*	**0.03***
1011020	Fat - swine	0.05*	**0.03***
1011030	Liver - swine	0.05*	**0.03***
1011040	Kidney - swine	0.05*	**0.03***
1011050	Edible offals (other than liver and kidney) - swine	0.05*	**0.03***
1011990	Others - swine	0.05*	**0.03***
1012000	Bovine	-	-
1012010	Muscle - bovine	0.05*	**0.03***
1012020	Fat - bovine	0.05*	**0.03***
1012030	Liver - bovine	0.05*	**0.03***
1012040	Kidney - bovine	0.05*	**0.03***
1012050	Edible offals (other than liver and kidney) - bovine	0.05*	**0.03***

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
1012990	Others - bovine	0.05*	**0.03***
1013000	Sheep	-	-
1013010	Muscle - sheep	0.05*	**0.03***
1013020	Fat - sheep	0.05*	**0.03***
1013030	Liver - sheep	0.05*	**0.03***
1013040	Kidney - sheep	0.05*	**0.03***
1013050	Edible offals (other than liver and kidney) - sheep	0.05*	**0.03***
1013990	Others - sheep	0.05*	**0.03***
1014000	Goat	-	-
1014010	Muscle - goat	0.05*	**0.03***
1014020	Fat - goat	0.05*	**0.03***
1014030	Liver - goat	0.05*	**0.03***
1014040	Kidney - goat	0.05*	**0.03***
1014050	Edible offals (other than liver and kidney) - goat	0.05*	**0.03***
1014990	Others - goat	0.05*	**0.03***
1015000	Equine	-	-
1015010	Muscle - equine	0.05*	**0.03***
1015020	Fat - equine	0.05*	**0.03***

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
1015030	Liver - equine	0.05*	**0.03***
1015040	Kidney - equine	0.05*	**0.03***
1015050	Edible offals (other than liver and kidney) - equine	0.05*	**0.03***
1015990	Others - equine	0.05*	**0.03***
1016000	Poultry	-	-
1016010	Muscle - poultry	0.05*	**0.03***
1016020	Fat - poultry	0.05*	**0.03***
1016030	Liver - poultry	0.05*	**0.03***
1016040	Kidney - poultry	0.05*	**0.03***
1016050	Edible offals (other than liver and kidney) - poultry	0.05*	**0.03***
1016990	Others - poultry	0.05*	**0.03***
1017000	Other farmed terrestrial animals	-	-
1017010	Muscle - other farmed terrestrial animals	0.05*	**0.03***
1017020	Fat - other farmed terrestrial animals	0.05*	**0.03***

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
1017030	Liver - other farmed terrestrial animals	0.05*	**0.03***
1017040	Kidney - other farmed terrestrial animals	0.05*	**0.03***
1017050	Edible offals (other than liver and kidney) - other farmed terrestrial animals	0.05*	**0.03***
1017990	Others - Other farm animals	0.05*	**0.03***
1020000	Milk	-	-
1020010	Cattle - milk	0.05*	**0.03***
1020020	Sheep - milk	0.05*	**0.03***
1020030	Goat - milk	0.05*	**0.03***
1020040	Horse - milk	0.05*	**0.03***
1020990	Others - Milk and cream	0.05*	**0.03***
1030000	Birds eggs	-	-
1030010	Chicken - eggs	0.05*	**0.03***
1030020	Duck - eggs	0.05*	**0.03***
1030030	Geese - eggs	0.05*	**0.03***
1030040	Quail - eggs	0.05*	**0.03***

Code No	Commodity to which the MRL applies	Current MRL in force (mg/kg)	Proposed MRL (mg/kg)
1030990	Others - Birds' eggs	0.05*	**0.03***
1040000	Honey and other apiculture products	-	-
1040000	Honey and other apiculture products	0.05	**0.05***
1050000	Amphibians and reptiles	-	-
1050000	Amphibians and reptiles	0.05	**0.03***
1060000	Terrestrial invertebrate animals	-	-
1060000	Terrestrial invertebrate animals	0.05	**0.03***
1070000	Wild terrestrial vertebrate animals	-	-
1070000	Wild terrestrial vertebrate animals	0.05	**0.03***

* denotes an MRL at the limit of quantification/ limit of determination

MRL changes are highlighted in **bold**

Notes

- Herbs and edible flowers (code 0256000) are regard as a difficult to analyse matrices and therefore the default LOQ MRL for these products should be set at 2 x 0.03* mg/kg

- Teas, coffee, herbal infusions, cocoa and carobs (code 0600000), hops (code 0700000) and spices (code 0800000) are regarded as difficult to analyse matrices and therefore the default LOQ MRL for these products should be set at 5 x 0.03* mg/kg, but respect a maximum limit of 0.1* mg/kg.
- The default LOQ MRL for honey is 0.05* mg/kg

References

EFSA (European Food Safety Authority), 2018. Peer review of the pesticide risk assessment of the active substance methiocarb, EFSA Journal 2018;16 (10): 5429

JMPR (Joint Meeting of the FAO/WHO on Pesticide Residues), 1999. Report 1999.

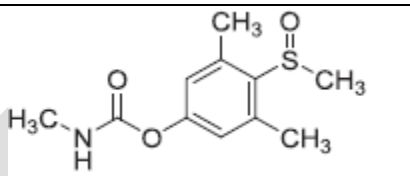
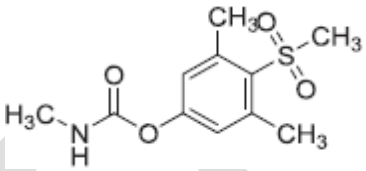
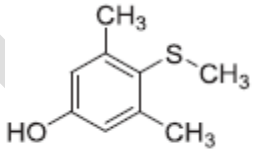
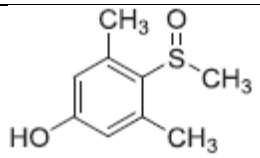
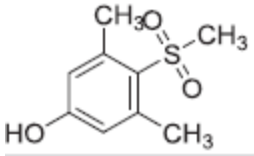
JMPR (Joint Meeting of the FAO/WHO on Pesticide Residues), 2005. Evaluations 2005, Part 1- Residues.

JMPR (Joint Meeting of the FAO/WHO on Pesticide Residues), 2005. Report 2005.

United Kingdom, 2018. Renewal Assessment Report (RAR) on the active substance methiocarb, prepared by the rapporteur Member State the United Kingdom in the framework of Regulation (EC) No 1107/2009, October 2018

Appendix A – Compound codes

Table A.1 List of metabolites identified

Code/Trivial name	Chemical name (IUPAC)	Structural formula
Methiocarb sulfoxide (M01)	3,5-dimethyl-4-(methylsulfinyl)phenyl methylcarbamate	
Methiocarb sulfone (M02)	3,5-dimethyl-4-(methylsulfonyl)phenyl methylcarbamate	
Methiocarb phenol (M03)	3,5-dimethyl-4-(methylthio)pheno	
Methiocarb sulfoxide phenol (M04)	3,5-dimethyl-4-(methylsulfinyl)phenol	
Methiocarb sulfone phenol (M05)	3,5-dimethyl-4-(methylsulfonyl)phenol	

Appendix B – Abbreviations

Acute_consumer_ver1.2 UK consumer model for acute dietary intake assessments

ADI acceptable daily intake

ADME absorption, distribution, metabolism and excretion

ALARA Principle as low as reasonably achievable

Animal model 2017 EFSA model used to calculate the dietary burden of livestock using the OECD feeding studies

ARfD acute reference dose

a.s. active substance

BBCH growth stages of mono- and dicotyledonous plants

bw body weight

CA Competent authority

Chronic_consumer_ver1.1 UK consumer model for chronic dietary intake assessments

CRD Chemicals Regulation Division of the HSE

CXL Codex maximum residue level

DA Devolved Administrations

DAR draft assessment report

DAT days after treatment

Defra Department of Environment, Food and Rural Affairs

DT90 period required for 90% dissipation (define method of estimation)

DT 50 period required for 50 % dissipation (define method of estimation)

FAO Food and Agriculture Organization of the United Nations

GAP Good Agricultural Practice

HPLC-MS/MS high-performance liquid chromatography with tandem mass spectrometry

HPLC-UVD high-performance liquid chromatography with ultraviolet detector

HR highest residue

HSE Health and Safety Executive

IEDI international estimated daily intake

IESTI international estimated short-term intake

ISO International Organisation for Standardisation

IUPAC International Union of Pure and Applied Chemistry

JMPR Joint FAO/WHO Meeting on Pesticide Residues

LOD limit of detection or limit of determination (should be defined)

LOQ limit of quantification

NB the limit of quantification and limit of determination are the same.

Regulation (EC) No 396/2005 refers to the limit of determination

Regulation (EC) No 1107/2009 refers to the limit of quantification

MRLs marked with an asterisk (e.g. 0.01* mg/kg) are MRLs set at the limit of quantification/determination

MRL maximum residue level

NEDI national estimated daily intake

NESTI national estimated short-term intake

NRL National reference laboratory

OECD Organisation for Economic Co-operation and Development

PBI plant-back interval

PHI preharvest interval

POAO products of animal origin

PRIMo (EFSA) Pesticide Residues Intake Model

QuEChERS Quick, Easy, Cheap, Effective, Rugged, and Safe (analytical method)

RA risk assessment

RAR Renewal Assessment Report

RD residue definition

RD-Enf residue definition for enforcement (also referred to as RD-Mo i.e. residue definition for monitoring)

RD-RA residue definition for risk assessment

RTI re-treatment interval

SC suspension concentrate

STMR supervised trials median residue

TRR total radioactive residue

WG water-dispersible granule

WHO World Health Organization