



EUROPEAN COMMISSION
HEALTH & CONSUMER PROTECTION DIRECTORATE-GENERAL

Directorate E – Safety of the food chain
Unit E.3 - Chemicals, contaminants, pesticides

Formetanate
SANCO/10034/20066 – rev. 1
06 July 2006

FINAL

Review report for the active substance **formetanate**

Finalised in the Standing Committee on the Food Chain and Animal Health at its meeting on
29 September 2006
in view of the inclusion of formetanate in Annex I of Directive 91/414/EEC

1. Procedure followed for the re-evaluation process

This review report has been established as a result of the re-evaluation of formetanate, made in the context of the work programme for review of existing active substances provided for in Article 8(2) of Directive 91/414/EEC concerning the placing of plant protection products on the market, with a view to the possible inclusion of this substance in Annex I to the Directive.

Commission Regulation (EC) No 451/2000⁽¹⁾ laying down the detailed rules for the implementation of the second and third stages of the programme of work referred to in Article 8(2) of Council Directive 91/414/EEC, as last amended by Regulation (EC) No 1490/2002⁽²⁾, has laid down the detailed rules on the procedure according to which the re-evaluation has to be carried out. Formetanate is one of the existing active substances covered by this Regulation.

In accordance with the provisions of Article 4 of Regulation (EC) No 451/2000, Aventis Crop Science GmbH notified to the Commission of their wish to secure the inclusion of the active substance formetanate in Annex I to the Directive.

In accordance with the provisions of Article 5 of Regulation (EC) No 451/2000, the Commission, designated Italy as rapporteur Member State to carry out the assessment of formetanate on the basis of the dossiers submitted by the notifiers. In Regulation (EC) No 703/2001³ the Commission specified furthermore that the deadline for the notifiers with regard to the submission to the rapporteur Member States of the dossiers required under Article 6(2) of Regulation (EC) No 451/2000, as well as for other parties with regard to further technical and scientific information was 30 April 2002.

¹ OJ No L 55, 29.02.2000, p.25.

² OJ No L 224, 21.8.2002, p.23.

³ OJ No L 98, 7.4.2001, p. 6.

On 13th June 2001, Aventis Crop Science informed the rapporteur Member State and the Commission that Margarita International had purchased the world wide formetanate business, on the basis of an asset purchase agreement having effect from 8th March 2001.

Margarita Internacional submitted by the deadline a dossier to the rapporteur Member State which did not contain substantial data gaps, taking into account the supported uses. Therefore Margarita International was considered to be the main data submitter.

In accordance with the provisions of Article 8(1) of Regulation (EC) No 451/2000, Italy submitted on 13 July 2004 to the EFSA the report of their examination, hereafter referred to as the draft assessment report, including, as required, a recommendation concerning the possible inclusion of formetanate in Annex I to the Directive. Moreover, in accordance with the provisions of Article 8(2) of Regulation (EC) 451/2000, the Commission and the Member States received also the summary dossier on formetanate from Margarita Internacional, on 19 August 2004.

In accordance with the provisions of Article 8 of Regulation (EC) No 451/2000, the EFSA organised the consultation on the draft assessment report by all the Member States as well as by Margarita Internacional being the main data submitters, on 23 July 2004 by making it available.

The EFSA organised an intensive consultation of technical experts from a certain number of Member States, to review the draft assessment report and the comments received thereon (peer review).

In accordance with the provisions of Article 8 (7) of Regulation 451/2000 the EFSA sent to the Commission its conclusion on the risk assessment [Conclusions regarding the peer review of the pesticide risk assessment of the active substance formetanate (finalised 24 April 2006)⁴]. This conclusion refers to background document A (draft assessment report) and background document B (EFSA peer review report).

In accordance with the provisions of Article 8 (7) of Regulation (EC) No 451/2000, the Commission referred on 29 September 2006 a draft review report to the Standing Committee on the Food Chain and Animal Health, for final examination. The draft review report was finalised in the meeting of the Standing Committee on 29 September 2006.

The present review report contains the conclusions of the final examination by the Standing Committee. Given the importance of the conclusion of the EFSA, and the comments and clarifications submitted after the conclusion of the EFSA (background document C), these documents are also considered to be part of this review report.

2. Purposes of this review report

This review report, including the background documents and appendices thereto, has been developed and finalised in support of the Directive **2007/5/EC**⁵ concerning the inclusion of formetanate in Annex I to Directive 91/414/EEC, and to assist the Member States in decisions on individual plant protection products containing formetanate they have to take in accordance with the provisions of that Directive, and in particular the provisions of article 4(1) and the uniform principles laid down in Annex VI.

⁴ *EFSA Scientific Report* (2006) 69, 1-78

⁵ Commission Directive 2007/5/EC (OJ L 35, 08.02.2007, p. 11)

This review report provides also for the evaluation required under Section A.2.(b) of the above mentioned uniform principles, as well as under several specific sections of part B of these principles. In these sections it is provided that Member States, in evaluating applications and granting authorisations, shall take into account the information concerning the active substance in Annex II of the directive, submitted for the purpose of inclusion of the active substance in Annex I, as well as the result of the evaluation of those data.

In accordance with the provisions of Article 8(9) of Regulation (EC) No 451/2000, Member States will keep available or make available this review report for consultation by any interested parties or will make it available to them on their specific request.

The information in this review report is, at least partly, based on information which is confidential and/or protected under the provisions of Directive 91/414/EEC. It is therefore recommended that this review report would not be accepted to support any registration outside the context of Directive 91/414/EEC, e.g. in third countries, for which the applicant has not demonstrated to have regulatory access to the information on which this review report is based.

3. Overall conclusion in the context of Directive 91/414/EEC

The overall conclusion from the evaluation is that it may be expected that plant protection products containing formetanate will fulfil the safety requirements laid down in Article 5(1)(a) and (b) of Directive 91/414/EEC. This conclusion is however subject to compliance with the particular requirements in sections 4, 5, 6 and 7 of this report, as well as to the implementation of the provisions of Article 4(1) and the uniform principles laid down in Annex VI of Directive 91/414/EEC, for each formetanate containing plant protection product for which Member States will grant or review the authorisation.

Furthermore, these conclusions were reached within the framework of the uses which were proposed and supported by the main data submitter and mentioned in the list of uses supported by available data (attached as Appendix II to this review report).

Extension of the use pattern beyond those described above will require an evaluation at Member State level in order to establish whether the proposed extensions of use can satisfy the requirements of Article 4(1) and of the uniform principles laid down in Annex VI of Directive 91/414/EEC.

The following reference values have been finalised as part of this re-evaluation:

ADI: 0.004 mg/kg bw/day

ArfD: 0.005 mg/kg bw

AOEL: 0.004 mg/kg bw/day

With particular regard to residues, the review has established that the residues arising from the proposed uses, consequent on application consistent with good plant protection practice, have no harmful effects on human or animal health. The Theoretical Maximum Daily Intake (TMDI; excluding water and products of animal origin) for a 60 kg adult is 5,5 % of the Acceptable Daily Intake (ADI), based on the FAO/WHO European Diet (August 1994).

Additional intake from water and products of animal origin are not expected to give rise to intake problems.

Estimates of acute dietary exposure of adults and toddlers revealed that the Acute Reference Dose (ARfD) would not be exceeded (European diet (UK) 97 % for infants), if the use on outdoor grown tomatoes and a MRL of 0.1 mg/kg is considered.

The review has identified several acceptable exposure scenarios for operators, workers and bystanders, which require however to be confirmed for each plant protection product in accordance with the relevant sections of the above mentioned uniform principles.

The review has also concluded that under the proposed and supported conditions of use there are no unacceptable effects on the environment, as provided for in Article 4 (1) (b) (iv) and (v) of Directive 91/414/EEC, provided that certain conditions are taken into account as detailed in section 6 of this report.

4. Identity

The main identity and the physical/chemical properties of formetanate are given in Appendix I.

At the time of the evaluation no FAO specification was allocated.

The review has established that for the active substance notified by the main data submitter none of the manufacturing impurities considered are, on the basis of information currently available, of toxicological or environmental concern.

5. Endpoints and related information

In order to facilitate Member States, in granting or reviewing authorisations, to apply adequately the provisions of Article 4(1) of Directive 91/414/EEC and the uniform principles laid down in Annex VI of that Directive, the most important endpoints were identified during the re-evaluation process. These endpoints are listed in the conclusion of the EFSA, and at section 3 of this report.

6. Particular conditions to be taken into account on short term basis by Member States in relation to the granting of authorisations of plant protection products containing formetanate

On the basis of the proposed and supported uses (as listed in Appendix II), the following particular issues have been identified as requiring particular and short term attention from all Member States, in the framework of any authorisations to be granted, varied or withdrawn, as appropriate:

- Member States should pay particular attention to the protection of **birds, mammals, bees and non-target arthropods** [*RMS proposal*]. Risk mitigation measures should be applied, where appropriate.
- **PPE are necessary to reduce the operator exposure (refer to point 2.12).**
- **Formetanate should not be applied later than two weeks before flowering.**

(These two conditions are proposed by RMS considering conclusions reached by EFSA).

7. List of studies to be generated

No further studies were identified which were at this stage considered necessary in relation to the inclusion of formetanate in Annex I under the current inclusion conditions.

Some endpoints however may require the generation or submission of additional studies to be submitted to the Member States in order to ensure authorisations for use under certain conditions. This may particularly be the case for

- Data on the identity of one unknown impurity ("no. 2" of the six unknown)
- Clarification with respect to the proposed specification for the maximum levels of certain impurities in the technical material.
- A shelf-life study.
- Unit to unit residue data addressing a representative range of practical conditions of use of formetanate on tomatoes grown in glasshouse in order to refine the variability factor to be used in acute exposure assessment.
 - Refined information on the form (raw or processed) tomatoes are consumed by young consumers (infants, toddlers).
 - The risk to birds has to be further addressed, including the risk from exposure via contaminated drinking water.
 - The acute risk to mammals has to be further addressed, including the risk from exposure via contaminated drinking.
 - Semi-field or field studies conducted with a sufficient number of species, to refine the risk assessment for non-target arthropods off-field and the potential for recolonisation and recovery-
 - An higher tier study with *Thyphlodromus pyri* to fully assess the risk to non-target arthropods.
 - The acute risk to earthworms from the soil metabolite 3-APMC needs to be further addressed.

(note from RMS: the above information is the one identified by EFSA in its assessment).

8. Information on studies with claimed data protection

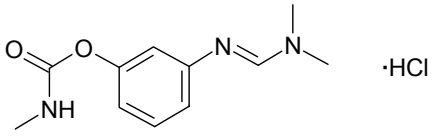
For information of any interested parties, the rapporteur Member State will keep available a document which gives information about the studies for which the main data submitter has claimed data protection and which during the re-evaluation process were considered as essential with a view to annex I inclusion. This information is only given to facilitate the operation of the provisions of Article 13 of Directive 91/414/EEC in the Member States. It is based on the best information available but it does not prejudice any rights or obligations of Member States or operators with regard to its uses in the implementation of the provisions of Article 13 of the Directive 91/414/EEC and neither does it commit the Commission.

9. Updating of this review report

The information in this report may require to be updated from time to time in order to take account of technical and scientific developments as well as of the results of the examination of any information referred to the Commission in the framework of Articles 7, 10 or 11 of Directive 91/414/EEC. Any such adaptation will be finalised in the Standing Committee on the Food Chain and Animal Health, in connection with any amendment of the inclusion conditions for formetanate in Annex I of the Directive.

APPENDIX I**Identity**

FORMETANATE

Common name (ISO)	Formetanate (unless otherwise stated, the following data relate to the variant formetanate hydrochloride)
Chemical name (IUPAC)	3-dimethylaminomethyleneaminophenyl methylcarbamate hydrochloride
Chemical name (CA)	<i>N,N</i> -dimethyl- <i>N'</i> -[3- [[[(methylamino)carbonyl]oxy]phenyl] methanimidamide hydrochloride
CIPAC No	697 (formetanate) 697.601 (formetanate hydrochloride)
CAS No	23422-53-9
EEC No	245-656-0
FAO SPECIFICATION	Not available
Minimum purity	910 g/kg
Molecular formula	C ₁₁ H ₁₆ ClN ₃ O ₂
Molecular mass	257.8
Structural formula	

APPENDIX II

List of uses supported by available data

FORMETANATE

Crop and/or situation (a)	Member State or Country	Product name	F G or I (b)	Pests or Group of pests controlled (c)	Formulation		Application				Application rate per treatment			PHI (days) (l)	Remarks: (m)
					Type (d-f)	Conc. of as (i)	method kind (f-h)	growth stage & season (j)	number min max (k)	interval between applications (min)	kg as/hl min max	water l/ha min max	kg as/ha min max		
Tomatoes	SE	Dicarzol (SG 500 g/kg)	F	Biting and sucking insects	SG	500 g/kg	Spraying	nr	1	nr	0.04 - 0.06	800 - 1200	0.5	14	
Ornamental shrubs	Europe	Dicarzol (SG 500 g/kg)	F	Biting and sucking insects	SG	500 g/kg	Spraying	nr	1	nr	0.06 - 0.07	700 - 800	0.5	nr	

- Remarks:**
- (a) For crops, the EU and Codex classifications (both) should be used; where relevant, the use situation should be described (*e.g.* fumigation of a structure)
 - (b) Outdoor or field use (F), glasshouse application (G) or indoor application (I)
 - (c) *e.g.* biting and suckling insects, soil born insects, foliar fungi, weeds
 - (d) *e.g.* wettable powder (WP), emulsifiable concentrate (EC), granule (GR)
 - (e) GCPF Codes - GIFAP Technical Monograph No 2, 1989
 - (f) All abbreviations used must be explained
 - (g) Method, *e.g.* high volume spraying, low volume spraying, spreading, dusting, drench
 - (h) Kind, *e.g.* overall, broadcast, aerial spraying, row, individual plant, between the plants - type of equipment used must be indicated
 - (i) g/kg or g/l
 - (j) Growth stage at last treatment (BBCH Monograph, Growth Stages of Plants, 1997, Blackwell, ISBN 3-8263-3152-4), including where relevant, information on season at time of application
 - (k) The minimum and maximum number of application possible under practical conditions of use must be provided
 - (l) PHI - minimum pre-harvest interval
 - (m) Remarks may include: Extent of use/economic importance/restrictions