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HEALTH & CONSUMER PROTECTION DIRECTORATE-GENERAL

Directorate E – Food Safety: plant health, animal health and welfare, international questions
E1 - Plant health

Thiacloprid
SANCO/4347/2000 – Final.
13 May 2004

**COMMISSION WORKING DOCUMENT - DOES NOT NECESSARILY REPRESENT
THE VIEWS OF THE COMMISSION SERVICES**

Review report for the active substance **thiacloprid**

Finalised in the Standing Committee on the Food Chain and Animal Health at its meeting on 29 June 2004 in view of the inclusion of thiacloprid in Annex I of Directive 91/414/EEC.

1. Procedure followed for the evaluation process

This review report has been established as a result of the evaluation of the new active substance thiacloprid, made in the context of the work provided for in Articles 5 and 6 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.

In accordance with the provisions of Article 6(2) of Directive 91/414/EEC, the United Kingdom authorities received on 11.09.1998 an application from Bayer Plc (now Bayer CropScience), hereafter referred to as the applicant, for the inclusion of the active substance thiacloprid in Annex I to the Directive. United Kingdom authorities indicated to the Commission on 28.06.1999 the results of a first examination of the completeness of the dossier, with regard to the data and information requirements provided for in Annex II and, for at least one plant protection product containing the active substance concerned, in Annex III to the Directive. Subsequently, and in accordance with the requirements of Article 6(2), a dossier on thiacloprid was distributed to the Member States and the Commission.

The Commission referred the dossier to the Standing Committee on the Food Chain and Animal Health in the meeting of the working group 'legislation' thereof on 20.07.1999, during which the Member States confirmed the receipt of the dossier.

In accordance with the provisions of Article 6(3), which requires the confirmation at Community level that the dossier is to be considered as satisfying, in principle, the data and information requirements provided for in Annex II and, for at least one plant protection product containing the active substance concerned, in Annex III to the Directive and in accordance with the

procedure laid down in Article 20 of the Directive, the Commission confirmed in its Decision 2000/181/EC¹ of 23.02.2000 that these requirements were satisfied.

Within the framework of that decision and with a view to the further organisation of the works related to the detailed examination of the dossier provided for in Article 6(2) and (4) of Directive 91/414/EEC, it was agreed between the Member States and the Commission that United Kingdom would, as rapporteur Member State, carry out the detailed examination of the dossier and report the conclusions of its examination accompanied by any recommendations on the inclusion or non-inclusion and any conditions relating thereto, to the Commission as soon as possible and at the latest within a period of one year.

The United Kingdom submitted to the Commission on 22 November 2000 the report of its detailed scientific examination, hereafter referred to as the draft assessment report, including, as required, a recommendation concerning the possible inclusion of thiacloprid in Annex I to the Directive.

On receipt of the draft assessment report, the Commission forwarded it for consultation to all the Member States on 18.01.2001 as well as to Bayer plc being the sole applicant 19.01.2001.

The Commission organised further an intensive consultation of specialised scientific experts from a representative number of Member States, to review the draft assessment report and the comments received thereon (peer review), in particular on each of the following disciplines :

- identity and physical /chemical properties ;
- fate and behaviour in the environment ;
- ecotoxicology ;
- mammalian toxicology ;
- residues and analytical methods ;
- regulatory questions.

The meetings for this consultation were organised on behalf of the Commission by the Biologische Bundesanstalt für Land und Forstwirtschaft (BBA) in Braunschweig, Germany, from March to September 2001.

The report of the peer review (i.e. full report) was circulated, for further consultation, to Member States and the sole applicant on 16.11.2001.

The dossier, draft assessment report and the peer review report (i.e. full report) including in particular an outline resumé of the remaining technical questions, were referred to the Standing Committee on the Food Chain and Animal Health, and specialised working groups of this Committee, for final examination, with participation of experts from the 15 Member States. This final examination took place from January 2003 to June 2004, and was finalised in the meeting of the Standing Committee on 29 June 2004.

The present review report contains the conclusions of this final examination; given the importance of the draft assessment report, the peer review report (i.e. full report) and the comments and clarifications submitted after the peer review as basic information for the final examination process, these documents are considered respectively as background documents A, B and C to this review report and are part of it.

¹ OJ No L57, 02.03.2000, p.35.

The review did not reveal any open questions or concerns, which would have required a consultation of the Scientific Committee on Plants

2. Purposes of this review report

This review report, including the background documents and appendices thereto, have been developed and finalised in support of the Directive 2004/99/ EC² concerning the inclusion of thiacloprid in Annex I to Directive 91/414/EEC, and to assist the Member States in decisions on individual plant protection products containing thiacloprid 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.

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 parallel with the provisions of Article 7(6) of Regulation 3600/92 for existing active substances, the Commission and the 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. Moreover the Commission will send a copy of this review report (not including the background documents) to the applicant.

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 possession of 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 thiacloprid 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 thiacloprid 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 IV to this Review Report).

² OJ No L 309, 06.10.2004, p. 6.

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.

4. Specific conclusions which are highlighted in this evaluation

4.1 Residues of thiacloprid in foodstuffs

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) for a 60 kg adult is 17 % of the Acceptable Daily Intake (ADI), based on the FAO/WHO European Diet (August 1994). This low intake value reflects the current limited use pattern for this active substance. Estimates of acute dietary exposure of adults and toddlers do not exceed the Acute Reference Dose (ARfD).

4.2 Exposure of operators, workers and bystanders

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

4.3 Ecotoxicology

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 7 of this report.

5. Identity and Physical/chemical properties

The main identity and the physical/chemical properties of thiacloprid are given in Appendix I. The active substance shall have a minimum purity of 975 g/kg technical product.

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

6. 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 as identified during the evaluation process are listed in Appendix II.

7. 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 thiacloprid

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

In this overall assessment, Member States

- should pay particular attention to the protection of non-target arthropods.
- should pay particular attention to the protection of aquatic organisms.
- should pay particular attention to the potential for groundwater contamination, when the active substance is applied in regions with vulnerable soil and/or climatic conditions.

Risk mitigation measures should be applied where appropriate.

8. List of studies to be generated

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

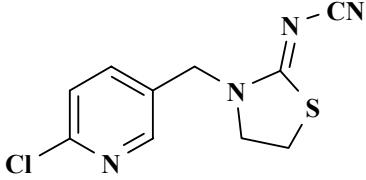
9. Updating of this review report

The technical information in this report may require periodic updating 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. Such adaptations will be examined and finalised in the Standing Committee on the Food Chain and Animal Health, in connection with any amendment of the inclusion conditions for thiacloprid in Annex I of the Directive.

APPENDIX I

Identity, physical and chemical properties

THIACLOPRID

Common name (ISO)	Thiacloprid
Development Code (for new actives only)	YRC 2894
Chemical name (IUPAC)	(Z)-N-{3-[(6-Chloro-3-pyridinyl)methyl]-1,3-thiazolan-2-ylidene}cyanamide
Chemical name (CA)	Cyanamide, [3-[(6-chloro-3-pyridinyl)methyl]-2-thiazolidinylidene]-
CIPAC No	631
CAS No	111988-49-9
EEC No	not allocated
FAO SPECIFICATION	an FAO specification does not yet exist
Minimum purity	975 g/kg
Molecular formula	C ₁₀ H ₉ ClN ₄ S
Molecular mass	252.73 g/mol
Structural formula	

Melting point	136 °C
Boiling point	Not determined as thermal decomposition starts at 270°C
Appearance	Yellowish solid
Relative density	1.46 g/cm ³
Vapour pressure	3 x 10 ⁻¹⁰ Pa at 20°C
Henry's law constant	5 x 10 ⁻¹⁰ Pa m ³ mol ⁻¹
Solubility in water	pH4: 186 mg/l at 20°C pH7: 184 mg/l at 20°C pH9: 185 mg/l at 20°C
Solubility in organic solvents	n-Hexane <0.1g/l at 20°C Xylene 0.30g/l at 20°C Dichloromethane 160g/l at 20°C 1-Octanol 1.4g/l at 20°C 1-Propanol 3.0g/l at 20°C Acetone 64g/l at 20°C Ethyl acetate 9.4g/l at 20°C Polyethylene glycol 42g/l at 20°C Acetonitrile 52g/l at 20°C Dimethyl sulfoxide 150g/l at 20°C
Partition co-efficient (log P_{ow})	Log P _{ow} = 1.26 at 20°C Water solubility unaffected by pH, therefore range of pHs not looked at.
Hydrolytic stability (DT₅₀)	Stable to hydrolysis at pH 5-9 at 25°C
Dissociation constant	Thiachloprid has no acid or basic properties in aqueous solution.
Quantum yield of direct photo-transformation in water at ε >290 nm	0.00035
Flammability	Non-flammable
Explosive properties	Non-explosive
UV/VIS absorption (max.)	No UV absorption above 290nm.
Photostability in water (DT₅₀)	DT = 80 days at pH 7 in sterile aqueous buffered solution, continuously irradiated with a Xenon lamp for a test period of 18 days or 324 days continuous sunlight for Phoenix, Arizona.

APPENDIX II

END POINTS AND RELATED INFORMATION

THIACLOPRID

1 Toxicology and metabolism

Absorption, distribution, excretion and metabolism in mammals

Rate and extent of absorption:	Rapid absorption. Around 95% based on oral and i.v. administration at low dose levels.
Distribution:	Widely distributed with the highest levels in liver and kidneys.
Potential for accumulation:	No evidence of accumulation.
Rate and extent of excretion:	Rapid-53-66% excreted in urine largely within 24 hours of dosing, 24-34% in faeces (i.v. administration show that faecal residues are largely due to biliary excretion).
Toxicologically significant compounds:	Parent compound and metabolites.
Metabolism in animals:	Extensive: oxidation, hydroxylation, opening of the thiazolidine ring and conjugation.

Acute toxicity

Rat LD ₅₀ oral:	Males: 621-836 mg/kg bw. Females: 396-444 mg/kg bw.
Rat LD ₅₀ dermal:	>2000 mg/kg bw.
Rat LC ₅₀ inhalation:	2.535 and 1.223 mg/l in male and females, respectively (4 hour exposure/nose only).
Skin irritation:	Not irritant.
Eye irritation:	Not irritant.
Skin sensitization (test method used and result):	Negative in a M & K test.

Short term toxicity

Target / critical effect:	Liver (enzyme induction and histopathological changes). Thyroid (hormonal effects and histopathological changes).
Lowest relevant oral NOAEL / NOEL:	100 ppm: 90-day rat study (equivalent to 7.3 mg/kg bw/day in males)

Lowest relevant dermal NOAEL / NOEL:	100 mg/kg bw/day (rat).
Lowest relevant inhalation NOAEL / NOEL:	0.182 mg/litre of air (rat).

Genotoxicity

No genotoxic potential.

Long term toxicity and carcinogenicity

Target / critical effect:	Liver (enzyme induction and histopathological changes). Thyroid (hormonal effects and histopathological changes). Nervous system (degeneration).
Lowest relevant NOAEL:	25 ppm (equivalent to 1.23 mg/kg bw/day).
Carcinogenicity:	Thyroid adenomas in male rats. Uterine adenocarcinomas in rats. Ovarian luteomas in mice.

Reproductive toxicity

Target / critical effect - Reproduction:	Dystocia, reduced pup weight and viability at maternally toxic dose levels.
Lowest relevant reproductive NOAEL / NOEL:	50 ppm: 2.7 mg/kg bw/day (rat).
Target / critical effect - Developmental toxicity:	Reduced foetal weight increased resorptions and increased skeletal effects at maternally toxic dose levels.
Lowest relevant developmental NOAEL / NOEL:	Maternal toxicity: 2 mg/kg bw/day (rabbit). Developmental toxicity: 10 mg/kg bw/day (rabbit).

Delayed neurotoxicity

Not required

Other toxicological studies

Metabolite data: M02 & M30 are less acutely toxic than parent compound; no genotoxic potential (Ames test).
Investigations on enzyme induction/reactions: The mechanistic data indicate that hepatic enzyme induction is the primary cause of the thyroid, uterine and ovarian changes.
Investigations on the reproductive findings: The mechanistic data indicate that there are no specific effects on birth functions.

Medical data

Thiacloprid is a new active substance. Limited data.
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Summary

	Value	Study	Safety factor
ADI:	0.01 mg/kg bw/day.	2-year rat study	100
AOEL systemic:	0.02 mg/kg bw/day.	Rabbit developmental study (maternal toxicity).	100
ARfD (acute reference dose):	0.03 mg/kg bw/day.	Acute neurotoxicity study (rat).	100

Dermal absorption

	Undiluted concentrate: 1% dermal absorption In-use dilution < 10% (values based on experimental studies)
Concentrate	1% based on <i>in vitro data</i> (human epidermal membranes) and supported by <i>in vivo data</i> (primate study).
In use dilution	10% based on <i>in vitro data</i> (human epidermal membranes) and supported by <i>in vivo data</i> (primate study).

2 Fate and behaviour in the environment

2.1 Fate and behaviour in soil

Route of degradation

Aerobic:

Mineralization after 100 days:

6.5-34 % after 100 days (n=4)

Non-extractable residues after 100 days:

22-30 % after 100 days (n=4)

Major metabolites above 10 % of applied active substance: name and/or code % of applied rate (range and maximum)

Major metabolites (>10%AR)

M02 60-74% after 3-30 days (n=4)

M30 4.5-20% after 14-100 days (n=4)

Supplemental studies

Anaerobic:

No data provided, not required for the currently requested uses (summer applications).

Soil photolysis:

Negligible (dissipation rate in irradiated sample comparable to dark controls)

Remarks:

none

Rate of degradation

Laboratory studies

DT_{50lab} (20 °C, aerobic):

DT_{50lab} (20°C, aerobic): ‡ means are geometric & normalised to field capacity

parent 0.7-5.0 days (n=4, r²=0.97-0.99) mean 1.3 days

M02 32-142 days (n=4) mean 41.7 days

M30 16-79 days (n=3, r²=0.98-0.99) mean 23.4 days

M34 8-52 days (n=3, r²=0.99-1.0) mean 15.1 days

DT_{90lab} (20 °C, aerobic):

parent 2.3-15.5 days (n=4)

M02 106-473 days (n=4)

M30 54-262 days (n=3, r²=0.98-0.99)

M34 26-175 days (n=3, r²=0.99-1.0)

DT_{50lab} (10 °C, aerobic):

From 20°C aerobic values above as 1.2-10.3 days using Q₁₀ of 2.2.

DT₅₀lab (20 °C, anaerobic):

not submitted, not required for intended uses

Field studies (country or region)DT_{50f} from soil dissipation studies:

Northern Europe	Southern Europe
parent 9-27 days (n=6)	10-16 days (n=2)r ² =0.82-0.98
M02 46-314 days (n=6)	68-107 days (n=2)r ² =0.9-0.99

DT_{90f} from soil dissipation studies:

Northern Europe	Southern Europe
parent 31-91 days (n=6)	35-53 days (n=2)
M02 153-1047 days (n=4)	226-357 days (n=4)

Soil accumulation studies:

Metabolite M02 could accumulate in Northern Europe. Plateau concentration calculated at 0.14mg/kg assuming DT50 of 314 days, 50% crop interception and 260g a.s./ha is applied a year.

Soil residue studies:

none

Remarks:

e.g. effect of soil pH on degradation rate

none

Adsorption/desorptionK_f / K_{oc}:

K_{oc} parent 393-870 (mean 615,1/n=0.83-0.94, n=6)
M02 166-438 (mean 258,1/n=0.76-0.91, n=5)
M30 11.9-26.2 (mean 19.8,1/n=0.91-0.98, n=5)

K_d:K_{d oc} M34 2.94-6.27 (mean 5.02, n=4)

pH dependence:

No evidence that changes in soil pH influences the sorption of parent or metabolites.

Mobility**Laboratory studies:**

Column leaching:

No data submitted, not required as satisfactory batch sorption data are available

Aged residue leaching:

Guideline: BBA
Aged for (days): 30 and 60
Precipitation (ml): 393
Leachate: 14.5% AR (day 30) and 19.4% AR (day 60)
Leachate 30day incubations (% AR):
parent undetected, M02 0.1, M30 11.6, unknowns 2
Leachate 60day incubations (% AR):
parent undetected, M02 undetected, M30 18.5, unknowns 1
73% AR retained in top 10cm (30 day incubations).

Field studies:

Lysimeter/Field leaching studies:

Location: Germany, Monheim
Study type: lysimeter
No. of applications: 2 years, 2 applications/year
Application rate (kg a.s./ha/year):
0.4 (1st year) and 0.365 (2nd year)
Average annual precipitation (mm): 869
Average annual leachate volume (mm): 372
% AR in leachate: 3%
Peak annual average concentrations (µg/l):
Total radioactivity 2.31 µg a.s. equivalents /l
Parent and M02 not detected
M30 2.4 µg/l
M34 0.27 µg/l
Unidentified Z5 0.15 µg a.s. equivalents /l
Z5 0.16 µg/l

Remarks:

none

2.2 Fate and behaviour in water

Abiotic degradation

Hydrolytic degradation:

pH 5 _____: Stable to hydrolysis
pH 7 _____: Stable to hydrolysis
pH 9 _____: Stable to hydrolysis

Major metabolites:

pH 5 _____: Stable to hydrolysis
pH 7 _____: Stable to hydrolysis
pH 9 _____: Stable to hydrolysis

Photolytic degradation:

Artificial irradiation equated to summer days, Phoenix Arizona; DT₅₀ 324 days. Stable to Photolysis no major (>10%AR) metabolites formed.

Major metabolites:

Artificial irradiation equated to summer days, Phoenix Arizona; DT₅₀ 324 days. Stable to Photolysis no major (>10%AR) metabolites formed.

Biological degradation

Readily biodegradable:

No data submitted, therefore not readily biodegradeable

Water/sediment study:

DT₅₀ water:

6-11 days

DT₉₀ water:

21-35 days (1st order, r²=0.98-0.98, n=2)

DT₅₀ whole system:

11-27 days

DT₉₀ whole system:

35-92 days (1st order, r²=0.97-0.99, n=2)

Distribution in water / sediment systems (active substance)

Maximum of 10-50%AR in sediment after 1-3 days.

Distribution in water / sediment systems (metabolites)

Water:

M02 max of 17-62%AR after 35 days

M30 represented 5.3-9.5% AR at the end of the study (100 days) with no evidence that concentrations had peaked.

Sediment:

M02 max of 7-36%AR after 35-62 days

Accumulation in water and/or sediment:

none

Degradation in the saturated zone not submitted, not required

Remarks:

none

2.3 Fate and behaviour in air

Volatility

Vapour pressure:

3×10^{-10} Pa at 20°C

Henry's law constant:

5×10^{-10} Pa m ³ mol ⁻¹

Photolytic degradation

Direct photolysis in air:

Not submitted

Photochemical oxidative degradation in air

DT₅₀:

Half life in upper atmosphere in the presence of hydroxyl radicals 1.5 hours (Calculation using the methods of Atkinson)
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Volatilisation:

from plant surfaces: ‡ 15% AR lost over 24 hours (volatiles not trapped)
from soil: ‡ 12% AR over 24 hours (volatiles not trapped)

Remarks:

none

3 Ecotoxicology

Terrestrial Vertebrates

Acute toxicity to mammals:

LD50: 444 mg a.s./kg bw (rat)
Multigen. study dietary NOEC: 50 ppm (rat)

Acute toxicity to birds:

LD50: 49 mg a.s./kg bw (*C. coturnix japonica*)
non-GLP study
[GLP study, LD50: 2716 mg a.s./kg bw
(*C virginianus*)]

Dietary toxicity to birds:

LC50 2500 ppm (*C. coturnix japonica*)

Reproductive toxicity to birds:

NOEC 60 ppm (*Anas platyrhynchos*)

Short term oral toxicity to mammals:

100 ppm: 90-day rat study (equivalent to 7.3 mg/kg bw/day in males)

Aquatic Organisms

Acute toxicity fish:

Lepomis macrochirus, 96 h; Oncorhynchus mykiss, 96 h

Long term toxicity fish:

Oncorhynchus mykiss, 97 d

Bioaccumulation fish:

Low potential for bioconcentration (Log Pow 1.26 at 20 °C).. Therefore, study not required as the Log Pow is ≥ 3 .

Acute toxicity invertebrate:

Daphnia magna 48 h; Hyalella azteca, 96 h

Chronic toxicity invertebrate:

Daphnia magna 21 d

Acute toxicity algae:

Scenedesmus subspicatus, 72 h

Chronic toxicity sediment dwelling organism:

Chironomus riparius, 28 d & 56 d

Honeybees

Acute oral toxicity:

Active substance: 17.32µg a.s./bee
YRC 2894 SC 480: 8.51 µg form/bee

Acute contact toxicity:

Active substance: 38.82µg a.s./bee
YRC 2894 SC 480: 51.6 µg form/bee

Other arthropod species*Test species**Typhlodromus. pyri**Aphidius rhopalosiphi**A. rhopalosiphi**(Ext lab)**A. rhopalosiphi**A. rhopalosiphi**Aleochara. bilineata**A. bilineata (Ext lab)**Poecilus. Cupreus*

Lycosid spiders

*Pardosa spp**Chrysoperla carnea (Ext. lab)**Coccinella septempunctata**C. septempunctata**C. septempunctata**C. septempunctata (Ext lab)**C. septempunctata (Ext lab/semi-field)**C. septempunctata**C. septempunctata*

	% Effect
<i>Typhlodromus. pyri</i>	>30% Mortality (60, 200, 400 g as/ha) >30% Beneficial capacity (60, 200, 400 g as/ha)
<i>Aphidius rhopalosiphi</i>	>30% Mortality (70 g as/ha)
<i>A. rhopalosiphi</i> <i>(Ext lab)</i>	>30% Mortality (216 g as/ha) <30% Parasitism (216 g as/ha)
<i>A. rhopalosiphi</i>	LC50:(6.8 g a.s./ha)
<i>A. rhopalosiphi</i>	LC50: (6.75 g a.s./ha)
<i>Aleochara. bilineata</i>	<30% Mortality (187.5, 375 g as/ha) >30% Repr (187.5, 375 g as/ha)
<i>A. bilineata (Ext lab)</i>	<30% Mortality (187.5, 375 g as/ha) <30% Repr (187.5, 375 g as/ha)
<i>Poecilus. Cupreus</i>	<30% Mortality (100, 216 g as/ha) >30% Behaviour (100, 216 g as/ha)
Lycosid spiders	>30% Mortality (187.5, 375 g as/ha)
<i>Pardosa spp</i>	>30% Feeding (187.5, 375 g as/ha)
<i>Chrysoperla carnea (Ext. lab)</i>	<30% Mortality (0.9, 7.2 g as/ha) >30% Mortality (72 g as/ha)
<i>Coccinella septempunctata</i>	>30% Mortality (60, 125, 375 g as/ha)
<i>C. septempunctata</i>	>30% Mortality (0.96, 9.6, 19.2 g as/ha)
<i>C. septempunctata</i>	<30% Mortality (4.8, 14.4 g as/ha) >30% Mortality (56.7, 76.8, 216 g as/ha) >30% Repr (4.8, 14.4, 56.7, 76.8, 216 g as/ha)
<i>C. septempunctata (Ext lab)</i>	<30% Mortality (0.96, 2.4, 9.6 g as/ha) >30% Mortality (4.8, 19.2, 38.4g as/ha)
<i>C. septempunctata (Ext lab/semi-field)</i>	>30% Mortality (60, 188 g as/ha) >30% Repr (188 g as/ha)
<i>C. septempunctata</i>	LC50: 24.8 g a.s./ha
<i>C. septempunctata</i>	(3 x 180 g a.s./ha) Corrected mortality 1h: 96% 14d: 58% 28d:-1 42d:22% No adverse effect on fecundity (at 28 days)

Earthworms

Acute toxicity:

LC50 14-day 105 mg a.s./kg soil (3 x 180 g a.s./ha) (active substance)
LC50 14-day 51 mg a.s./kg soil (YRC 2894 SC 480)
LC50 14-day M02 >1000 mg/kg
LC50 14-day M30 >1000 mg/kg

Reproductive toxicity:

NOEC 56-day <62.5 g a.s./ha (YRC 2894 SC 480)

Soil micro-organisms

Nitrogen mineralization:

<25 % after 28 days at 2.57 mg a.s./kg soil

Carbon mineralization:

<25 % after 28 days at 2.57 mg a.s./kg soil

APPENDIX III**THIACLOPRID**

List of studies which were submitted during the evaluation process and were not cited in the draft assessment report:

B.1 Identity, B.2 Physical and chemical properties, B.3 Data on application and further information, B.4 Proposals for classification and labelling, B.5 Methods of analysis

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
II A, 1.11 /01	Reubke, K.-J.	2001	Material Accountability of Thiacloprid (YRC 2894) (including Amendment 1) Bayer AG, Report No.: 159202148, Date: 02.07.2001, Amended: 04.09.2002 GLP, unpublished
II A, 1.11 /03	Wanner, B., Rauen, H. W.	2002	Active Ingredients- Certified limits of CALYPSO E techn. Bayer CropScience, Monheim, Germany Bayer AG, Report No.: MO-02-013320, Date: 19.07.2002 Non GLP, unpublished confidential
II A, 2.5.1 /01	Etzel, W.	1999	Spectral data set of YRC 2894 Bayer AG, Report No.: 156002090, Date: 17.03.1999 GLP, unpublished
II A, 2.8 /02	Gruener, R.	2001	Partition Coefficient in Octanol-Water of YRC 2894- amide Bayer AG, Report No.: MO-01-021878, Date: 23.11.2001 GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
II A, 4.1 /04	Reubke, K. J.	1999	YRC 2894 ; By-products - HPLC - external standard Bayer AG, Report No.: 2005-0009501-99, Date: 14.09.1999 Non GLP, unpublished
II A, 4.1 /05	Wanner, B.	1999a	Analytical procedure for the determination of sulphated ash Bayer AG, Report No.: 2005-0000602-99, Date: 29.10.1999 Non GLP, unpublished
II A, 4.1	Wanner, B.	1999b	Analytical procedure for the determination of sulphated ash Bayer AG, Report No.: 2005-0000602-99 E, Date: 28.10.1999 Revision Non GLP, unpublished
II A, 4.1 /06	Wanner, B.	2000a	Analytical procedure for the argentometric determination of ionogenic chloine Bayer AG, Report No.: 2005-0000703-00, Date: 11.05.2000 Non GLP, unpublished confidential
II A, 4.1	Wanner, B.	2000b	Analytical procedure for the argentometric determination of ionogenic chloine Bayer AG, Report No.: 2005-0000702-99 E, Date: 17.11.1999 Non GLP, unpublished confidential
II A, 4.1 /07	Wanner, B.	1999c	Analytical procedure for the Karl Fischer water determination Bayer AG, Report No.: 2005-0009701-99, Date: 04.11.1999 Non GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
II A, 4.1 /08	Reubke, K. J.	1999	Determination of 1-Butanol ; Assay - GLC - external standard (Headspace) Bayer AG, Report No.: 2005-0010201-99, Date: 30.11.1999 Non GLP, unpublished
II A, 4.1 /09	Reubke, K. J.	2000	Validation report ; Method 2005-0009501-99 ; YRC 2894 - By-products - HPLC - external standard Bayer AG, Report No.: V01.02-2005-0009501, Date: 03.08.2000 Non GLP, unpublished
II A, 4.1 /10	Schroeder, S.	2000	Validation report VB1-2005-0000703-00E ; Argentometric determination of ionogenic chlorine Bayer AG, Report No.: VB1-2005-0000703, Date: 09.05.2000 Non GLP, unpublished confidential

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
III A, 5.1 /03	Seidel, E.	2000	Determination of Thiachloprid in formulations Bayer AG, Report No.: 2001-0039802-00, Date: 07.11.2000 Non GLP, unpublished
III A, 5.1 /04	Odendahl, A.	2001	Validation of HPLC-method 2001-0039802-00 - Determination of YRC 2894 in formulations- Bayer AG, Report No.: VB1-2001-0039802, Date: 05.01.2001 Non GLP, unpublished

B.6 Toxicology and metabolism

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
II A, 5.2.3 /01	Pauluhn, J.	1996	YRC 2894 - Study on acute inhalation toxicity in rats according to OECD no. 403 Bayer AG, Report No.: 24775, Date: 09.02.1996 GLP, unpublished
IIA, 5.3.3.1/01	Pauluhn, J.	1995	YRC 2894 - Pilot study on subacute inhalation toxicity in rats (Exposure: 5 x 6 hours) Bayer AG, Report No.: 24248 Date: 21.08.1995 Amended 21.08.1999 GLP, unpublished
II A, 5.5.4 /01	Lamb, J. C.	1998	Cancer hazard assessment and characterization of YRC 2894 Jellinek, Schwartz & Connolly, Inc., Arlington, VA, USA Bayer AG, Report No.: BC8788, Date: 22.09.1998 GLP, unpublished
II A, 5.6.2.1 /02	Holzum, B.	2000	YRC 2894 - Development toxicity study in rats after oral administration (report no. 26132 of March 25, 1997) - additional information on dysplasia of limb bones in fetuses Bayer AG, Report No.: MO-01-000450, Date: 18.12.2000 Non GLP, unpublished
II A, 5.8.1.1.3 /01	Klein, O.; Diesing, L.	2001 a	Thiacloprid - Assessment of the toxicological significance of the amide metabolite (M02) Bayer AG, Report No.: REG01-0035, Date: 08.10.2001 Non GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
II A, 5.8.1.2.3 /01	Klein, O.; Diesing, L.	2001 b	Thiacloprid - Assessment of the toxicological significance of the metabolites M30 (sulfonic acid metabolite) and M34 Bayer AG, Report No.: REG01-0034, Date: 08.10.2001 Non GLP, unpublished
II A, 5.8.2.2.1 /02	Andrews, P.	2000	YRC 2894 (c.n.: Thiacloprid) - Special study for subacute oral toxicity in rats (feeding study for 3 weeks) Bayer AG, Report No.: 29674, Date: 14.03.2000, Amended: 16.11.2000 GLP, unpublished
II A, 5.8.2.4.2 /05	Eigenberg, D. A.	1998	A reproduction study in rats to determine if administration of technical YRC 2894 from gestation days 18 to 21 will cause dystocia Bayer Corporation, Stilwell, KS, USA Bayer AG, Report No.: 107639, Date: 24.07.1998, Amended: 20.06.2000 GLP, unpublished

Plant Protection Product - 'YRC 2894 SC480'

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
III A, 7.1.3 /01	Pauluhn, J.; Temerowski, M.	1998	Revised final report of report no. 28115: YRC 2894 480 SC 05776/0096 (c.n.: Thiachloprid) - Study on acute inhalation toxicity in rats according to OECD No. 403 Bayer AG, Report No.: 28115A, Date:04.11.1998, Amended:12.05.1999 GLP, unpublished
III A, 7.3 /01	Burgsteden, J. A. van	2002	In vitro percutaneous absorption study with [thiazolidine-4,5-14C]Thiachloprid 480 SC (Calypso 480 SC (R)) using human and rat epidermal membranes TNO Nutrition and Food Research Institute, Zeist, Netherlands Bayer AG, Report No.: V 3975, Date:07.01.2002 GLP, unpublished
III A, 7.3 /02	Wicke, H.	2002	Application for approval for the use of YRC 2894 Calypso on various crops Bayer CropScience AG, Monheim, Germany Bayer AG, Report No.: MR-439/02, Date: 21.10.2002 Non GLP, unpublished
III A, 7.3	Anon	2002	An Exploratory Study to Determine the rate and route of elimination of YRC 2894 when Administrated Intravenously or Dermally to Male Rhesus Monkeys - Charles Rivers Laboratories Bayer CropScience LP, Report No.:200437 Date: 30.12.2002 GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
III A, 7.3	Anon	2002	A Study to Determine the Dermal Absorption of [14C]YRC 2894 in SC 480 Formulation when Administrated Dermally to Male Rhesus Monkeys - Charles Rivers Laboratories Bayer CropScience LP, Report No.:200436 Date: 30.12.2002 GLP, unpublished

B.7 Residue data

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
XXX	XXX	XXX	XXX

B.8 Environmental fate and behaviour

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIA, 7.1.1.1.1/ 01, 7.1.1.2.1/ 01	Fritz, R., Bornatsch, W.	1998	Degradation and metabolism of [¹⁴ C]YRC 2894 in soils under aerobic conditions Bayer AG, Report No.: PF4332 (MR-544/97) Date: 17.03.1998 GLP, unpublished <i>also filed: IIA, 8.4.2/ 02</i> <i>also submitted under: IIIA, 9.1.3/ 03</i>
IIA, 7.1.1.1.2/ 01	Hellpointner, E.	1998b	Photolysis of [¹⁴ C]YRC 2894 on soil surface Bayer AG, Report No.: PF4333 Date: 26.02.1998 GLP, unpublished
IIA, 7.1.1.2.1/ 02	Hellpointner, E.	1998a	Degradation of [methylene- ¹⁴ C]WAK 6999 in three soils Bayer AG, Report No.: PF4334 Date: 11.02.1998 GLP, unpublished <i>also submitted under: IIIA, 9.1.3/ 05</i>

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIA, 7.1.1.2.2/ 01	Sommer, H.	1997d	Dissipation of YRC 2894 (480 SC) in soil under field conditions (France, Germany, Great Britain) Bayer AG, Report Nos.: RA-2076/95 (R502855,R502863,R502871, R505633,R505641, R505668) Date: 14.11.1997 GLP, unpublished <i>also submitted under: IIIA, 9.2.1/03</i>
IIA, 7.1.1.2.2/ 02	Sommer, H.	1998a	Dissipation of YRC 2894 (480 SC) in soil under field conditions. (France and Spain) Bayer AG, Report Nos.: RA-2077/95 (R502898, R502928) Date: 22.01.1998 GLP, unpublished <i>also submitted under: IIIA, 9.2.1/04</i>
IIA, 7.1.1.2.2/ 03	Sommer, H.	1997a	Method 00440 (MR-368/96) for liquid chromatographic determination of YRC 2894 and the metabolites YRC 2894-amide and YRC 2894-sulfonic acid in soil Bayer AG, Report No.: MR-368/96 Date: 20.01.1997 GLP, unpublished <i>also filed: IIA, 4.2.2/03</i>
IIA, 7.1.1.2.3/ 01	Sommer, H.	1998c	Storage stability of YRC 2894 and the metabolites YRC 2894 amide (KKO 2254) and YRC 2894 sulfonic acid (WAK 6999) in soil Bayer AG, Report No.: MR-824/97 Date: 25.06.1998 GLP, unpublished
IIA, 7.1.1.2.3/ 02	Sommer, H.	1998b	Storage stability of YRC 2894 and the metabolites YRC 2894 amide (KKO 2254) and YRC 2894 sulfonic acid (WAK 6999) in soil after storage of field samples for 3 years Bayer AG, Report No.: MR-456/98 Date: 24.06.1998 GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIA, 7.1.1.2.3/ 03	Sommer, H.	1997b	Method 00440 M001 for liquid chromatographic determination of YRC 2894 and the metabolites YRC 2894-amide and YRC 2894-sulfonic acid in soil Bayer AG, Report No.: MR-21/97 Date: 07.11.1997 GLP, unpublished <i>also filed: IIA, 4.2.2/ 04</i>
IIA, 7.1.2/ 01	Henneböle, J.	1994	Adsorption/desorption of YRC 2894 on soils Bayer AG, Report No.: PF3980 Date: 09.06.1994, <i>revised 05.12.1995</i> GLP, unpublished <i>also submitted under: IIIA, 9.1.3/ 06</i> <i>and: IIIA, 10.2/04</i>
IIA, 7.1.2	Henneböle, J.	1999	Adsorption/desorption of YRC 2894 on soils Bayer AG, Report No.: PF3980 (also MS 930) Date: <i>revised 20.10.1999</i> GLP, unpublished
IIA, 7.1.2/ 02	Graney, R.	1995	Adsorption/desorption of KKO 2254 on soils Bayer AG, Report No.: PF4062 Date: 26.06.1995 GLP, unpublished <i>also submitted under: IIIA, 9.1.3/ 07</i>
IIA, 7.1.2/ 03	Brumhard, B.	1998b	Adsorption/desorption of WAK 6999 on different soils Bayer AG, Report No.: PF4339 Date: 11.03.1998 GLP, unpublished
IIA, 7.1.3.2/ 01	Henneböle, J.	1995	Leaching behaviour of the crop protection compound YRC 2894 with previous ageing in soil Bayer AG, Report No.: PF4099 Date: 31.10.1995, <i>revised 22.12.1995</i> GLP, unpublished <i>also submitted under: IIIA, 9.1.3/ 08</i>
IIA, 7.1.3.3/ 01	Brumhard, B.	1998c	Lysimeter study for testing the leaching behaviour of YRC 2894 in case of repeated application on grass Bayer AG, Report No.: PF4342 Date: 02.07.1998 GLP, unpublished <i>also submitted under: IIIA, 9.2.1/05</i>

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIA, 7.1.3.3/ 02	Dorgerloh, M.	1995c	YRC 2894 - sulfonic acid - acute toxicity (96 hours) to rainbow trout (<i>Oncorhynchus mykiss</i>) in a static test Bayer AG, Report No.: DOM 95051 Date: 26.09.1995 GLP, unpublished <i>also filed: IIA, 8.2.1/ 05</i>
IIA, 7.1.3.3/ 03	Heimbach, F.	1995c	Acute toxicity of YRC 2894 - sulfonic acid to waterfleas (<i>Daphnia magna</i>) Bayer AG, Report No.: HBF/Dm 152 Date: 16.02.1995 GLP, unpublished <i>also filed: IIA, 8.2.4/ 02</i>
IIA, 7.1.3.3/ 04	Anderson, J.P.E.	1996	Influence of YRC 2894 - sulfonic acid on the growth of the green alga, <i>Scenedesmus subspicatus</i> Bayer AG, Report No.: AJO/130495 Date: 28.02.1996 GLP, unpublished
IIA, 7.2.1/ 01	Krohn, J.	1996	Physical and chemical properties of YRC 2894 Bayer AG, Report No.: PC 1418 Date: 09.07.1996 GLP, unpublished <i>also filed: IIA, 2.1.1/ 01</i> <i>IIA, 8.2.3/ 01</i>
IIA, 7.2.1.1/ 01	Brumhard, B.	1998a	Hydrolysis of YRC 2894 in sterile aqueous buffer solutions Bayer AG, Report No.: PF4338 Date: 16.02.1998 GLP, unpublished <i>also filed: IIA, 2.9.1/ 01</i>
IIA, 7.2.1.2/ 01	Hellpointner, E.	1995a	Determination of the quantum yield and assessment of the environmental half-life of the direct photodegradation of YRC 2894 in water Bayer AG, Report No.: PF4083 Date: 01.03.1995 GLP, unpublished <i>also filed: IIA, 2.9.3/ 01</i>

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIA, 7.2.1.2/ 02	Henneböle, J., Bornatsch, W.	1998	Photolysis of YRC 2894 in aqueous buffer solution Bayer AG, Report No.: PF4330 Date: 18.02.1998 GLP, unpublished <i>also filed: IIA, 2.9.2/ 01</i>
IIA, 7.2.1.3.2/ 01	Riegner, K.	1997b	Aerobic aquatic degradation and metabolism of YRC 2894 in the water-sediment system Bayer AG, Report No.: PF4273 (MR-622/97) Date: 09.12.1997 GLP, unpublished <i>also filed: IIA, 8.2/ 01</i> <i>also submitted under: IIIA, 9.2.2/01</i>
IIA, 7.2.1.3.2/ 02	Fritz, R.	1998	Anaerobic aquatic metabolism of the active ingredient YRC 2894 Bayer AG, Report No.: PF4352 Date: 23.03.1998 GLP, unpublished
IIA, 7.2.2.1/ 01	Krohn, J.	1996	⇒ IIA, 7.2.1/ 01
IIA, 7.2.2.2/ 01	Riegner, K.	1997a	Determination of the volatilization behaviour of YRC 2894 in a field trial Bayer AG, Report No.: PF4246 Date: 14.07.1997 GLP, unpublished
IIA, 7.2.2.2/ 01	Riegner, K.	1997a	Determination of the volatilization behaviour of YRC 2894 in a field trial Bayer AG, Report No.: PF4246 Date: 14.07.1997 GLP, unpublished
II A, 7.1.1.1.1 /02	Schad, T.	2002	Calculation of DT50 values of the YRC 2894 metabolite YRC 2894-sulfonic acid amid (M34) based on aerobic soil degradation studies Bayer AG, Report No.: MR-084/02, Date: 28.02.2002 Non GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
II A, 7.1.1.2.1 /04	Krohn, J.	2001	Position paper: Dissipation of thiacloprid in soil - Formation of M 34 from M 30 Bayer AG, Report No.: REG01-0033, Date: 08.10.2001 Non GLP, unpublished
II A, 7.1.2 /04	Stupp, H. P.	2002a	Adsorption and desorption of YRC2894-sulfonic acid amide in soils Bayer AG, Report No.: MR-102/02, Date: 28.03.2002 GLP, unpublished
II A, 7.1.3.3 /05	Stupp, H. P.	2002b	[Lysimeter metabolite Z5]: Characterisation of metabolite Z5 observed in leachate of lysimeter Bayer AG, Report No.: MR-120/02, Date: 28.03.2002 Non GLP, unpublished
II A, 7.1.3.3 /06	Stupp, H. P.	2002c	Investigation to identify the radioactive zone Z5 detected in lysimeter of YRC2894 Bayer AG, Report No.: MR-313/02, Date: 09.09.2002 GLP, unpublished
II A, 7.1.3.3 /07	Stupp, H. P.	2002d	Formation and identification of metabolites of YRC2894 (e.g. Z5) in lysimeter soil Bayer AG, Report No.: MR-340/02, Date: 12.09.2002 GLP, unpublished
II A, 7.1.3.3 /08	Krohn, J.; Grau, R.	2002	Position paper: Environmental behaviour and ecotoxicological relevance of metabolites of YRC 2894 Bayer CropScience, Monheim, Germany Bayer AG, Report No.: YRC2894-2002-10-11, Date: 11.10.2002 Non GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIIA, 9.1.3/ 03	Fritz, R., Bornatsch, W.	1998	Degradation and metabolism of [¹⁴ C]YRC 2894 in soils under aerobic conditions Bayer AG, Report No.: PF4332 Date: 17.03.1998 GLP, unpublished <i>filed as: IIA, 7.1.1.1.1/ 01</i>
IIIA, 9.1.3/ 05	Hellpointner, E.	1998 a	Degradation of [methylene- ¹⁴ C]WAK 6999 in three soils Bayer AG, Report No.: PF4334 Date: 11.02.1998 GLP, unpublished <i>filed as: IIA, 7.1.1.2.1/ 02</i>
IIIA, 9.1.3/ 06	Henneböle, J.	1994	Adsorption/desorption of YRC 2894 on soils Bayer AG, Report No.: PF3980 Date: 09.06.1994, <i>revised: 05.12.1995</i> GLP, unpublished <i>filed as: IIA, 7.1.2/ 01</i>
IIIA, 9.1.3/ 08	Brumhard, B.	1998 b	Adsorption/desorption of WAK 6999 on different soils Bayer AG, Report No.: PF4339 Date: 11.03.1998 GLP, unpublished <i>filed as: IIA, 7.1.2/ 03</i>
IIIA, 9.2.1/ 03	Sommer, H.	1997 d	Dissipation of YRC 2894 (480 SC) in soil under field conditions (France, Germany, Great Britain) Bayer AG, Report Nos.: RA-2076/95 (R502855, R502863, R502871, R505633, R505641, R505668) Date: 14.11.1997 GLP, unpublished <i>filed as: IIA, 7.1.1.2.2/ 01</i>

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIIA, 9.2.1/ 04	Sommer, H.	1998 a	Dissipation of YRC 2894 (480 SC) in soil under field conditions (France and Spain) Bayer AG, Report No.: RA-2077/95 (R502898, R502928) Date: 22.01.1998 GLP, unpublished <i>filed as: IIA, 7.1.1.2.2/ 02</i>
IIIA, 9.2.1/ 05	Brumhard, B.	1998 c	Lysimeter study for testing the leaching behaviour of YRC 2894 in case of repeated application on grass Bayer AG, Report No.: PF4342 Date: 02.07.1998 GLP, unpublished <i>filed as: IIA, 7.1.3.3/ 01</i>
IIIA, 9.2.2/ 01	Riegner, K.	1997 b	Aerobic aquatic degradation and metabolism of YRC 2894 in the water-sediment system Bayer AG, Report No.: PF4273 (MR-622/97) Date: 09.12.1997 GLP, unpublished <i>filed as: IIA, 7.2.1.3.2/ 01</i> also submitted under: <i>IIA, 8.2/01</i>
III A, 9.1.3 /09	Schaefer, H.	2002 a	Long-Term predicted environmental concentrations of thiacloprid metabolite KKO 2254 in soil after repeated use Bayer AG, Report No.: MR-069/02, Date: 15.02.2002 Non GLP, unpublished
III A, 9.2.1 /06	Schaefer, H.	2002 b	Expected concentrations of thiacloprid metabolite Z5 in percolate water considering intended application rates and plant interception Bayer AG, Report No.: MR-093/02, Date: 27.02.2002 Non GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
III A, 9.2.1 /07	Schaefer, H.	2001 c	Predicted environmental concentration of YRC 2894 and its metabolites KKO2254 and WAK6999 in ground water recharge based on PELMO Use in different crops in Northern Europe Bayer AG, Report No.: MR-029/01, Date: 22.01.2001 Non GLP, unpublished
III A, 9.2.1 /08	Schaefer, H.	2001 d	Predicted environmental concentration of YRC 2894 and its Metabolites KKO2254 and WAK6999 in ground water recharge based on PELMO Use in different crops in Southern Europe Bayer AG, Report No.: MR-037/01, Date: 22.01.2001 Non GLP, unpublished
III A, 9.2.1 /09	Schaefer, H.	2002 e	Predicted environmental concentration of thiacloprid and its metabolites KKO2254 and WAK6999 in ground water recharge based on FOCUS-PELMO Use in apples and tomatoes in Northern and Southern Europe Bayer AG, Report No.: MR-201/02, Date: 17.05.2002 Non GLP, unpublished
III A, 9.2.3 /05	Schaefer, H.	2001f	Predicted environmental concentration of thiacloprid in surface water based on calculations with EXAMS Bayer AG, Report No.: MR-528/00, Date: 17.01.2001 Non GLP, unpublished

B.9 Ecotoxicology

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIA, 8.1.1/ 01	Grau, R.	1995c	YRC 2894 techn., acute oral toxicity to bobwhite quail Bayer AG, Report No.: VB-036 Date: 07.09.1995, revised 21.09.1998 GLP, unpublished
IIA, 8.1.1	Grau, R.	1995c	YRC 2894 techn., acute oral toxicity to bobwhite quail Bayer AG, Report No.: VB-036 Date: 07.09.1995, revised 21.09.1998 GLP, unpublished
IIA, 8.1.2/ 01	Schmuck, R.	1998a	Five-day dietary toxicity of YRC 2894 on mallard ducklings (<i>Anas platyrhynchos</i>) Bayer AG, Report No.: SXR/VE 010 Date: 02.02.1998, revised 21.09.1998 GLP, unpublished
IIA, 8.1.2/ 02	Grau, R.	1995a	YRC 2894 techn., 5-day dietary LC ₅₀ to bobwhite quail Bayer AG, Report No.: VB-043 Date: 08.09.1995, revised 21.09.1998 GLP, unpublished
IIA, 8.1.2/ 03	Grau, R.	1995b	YRC 2894 techn., 5-day dietary LC ₅₀ to Japanese quail Bayer AG, Report No.: VW-176 Date: 29.09.1995 GLP, unpublished
IIA, 8.1.3/ 01	Schmuck, R.	1998b	Effects of a subchronic dietary exposure to YRC 2894 (techn.) on Japanese quail including effects on reproduction and health Bayer AG, Report No.: SXR/REP 07 Date: 16.02.1998 GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIA, 8.1.3/ 02	Schmuck, R.	1997a	Effects of a subchronic dietary exposure of YRC 2894 (techn.) on bobwhite quail including effects on reproduction and health Bayer AG, Report No.: SXR/REP 05 Date: 04.08.1997 GLP, unpublished
IIA, 8.1.3/ 03	Hancock, G.A.	1997a	Effect of technical YRC 2894 on mallard reproduction Bayer Corporation, Report No.: 107360 Date: 18.12.1997 GLP, unpublished
IIA, 8.2/ 01	Riegner, K.	1997b	Aerobic aquatic degradation and metabolism of YRC 2894 in water-sediment system Bayer AG, Report No.: PF4273 (MR-622/97) Date: 09.12.1997 GLP, unpublished <i>also filed: IIA, 7.2.1.3.2/ 01</i>
IIA, 8.2.1/ 01	Dorgerloh, M.	1995a	YRC 2894 techn., acute toxicity (96 hours) to rainbow trout (<i>Oncorhynchus mykiss</i>) in a static test Bayer AG, Report No.: DOM 95004 Date: 11.04.1995, revised 25.09.1998 GLP, unpublished
IIA, 8.2.1/ 02	Dorgerloh, M.	1995b	YRC 2894 techn., acute toxicity (96 hours) to bluegill (<i>Lepomis macrochirus</i>) in a static test Bayer AG, Report No.: DOM 95003 Date: 20.08.1995 GLP, unpublished
IIA, 8.2.1/ 03	Bowers, L.M.	1997a	Acute toxicity of KKO 2254 to the bluegill (<i>Lepomis macrochirus</i>) under static conditions Bayer AG, Report No.: 107746 Date: 30.06.1997 GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIA, 8.2.1/ 04	Lam, C.V.	1998	Acute toxicity of KKO 2254 to the rainbow trout (<i>Oncorhynchus mykiss</i>) under static conditions Bayer AG, Report No.: 107943 Date: 08.01.1998 GLP, unpublished
IIA, 8.2.1/ 05	Dorgerloh, M.	1995c	YRC 2894 - sulfonic acid - acute toxicity (96 hours) to rainbow trout (<i>Oncorhynchus mykiss</i>) in a static test Bayer AG, Report No.: DOM 95051 Date: 26.09.1995 GLP, unpublished <i>also filed: IIA, 7.1.3.3/02</i>
IIA, 8.2.2.2/ 01	Dorgerloh, M.	1997	YRC 2894 techn., early life stage toxicity to rainbow trout (<i>Oncorhynchus mykiss</i>) under flow-through conditions Bayer AG, Report No.: DOM 95018 Date: 05.08.1997 GLP, unpublished
IIA, 8.2.3/ 01	Krohn, J.	1996	Physical and chemical properties of YRC 2894 Bayer AG, Report No.: PC 1418 Date: 09.07.1996 GLP, unpublished <i>also filed: IIA, 2.1.1/ 01</i> <i>IIA, 7.2.1/ 01</i>
IIA, 8.2.4/ 01	Heimbach, F.	1995b	Acute toxicity of YRC 2894 (techn.) to water fleas (<i>Daphnia magna</i>) Bayer AG, Report No.: HBF/Dm 141 Date: 16.05.1995 GLP, unpublished
IIA, 8.2.4/ 02	Heimbach, F.	1995c	Acute toxicity of YRC 2894 – sulfonic acid to water fleas (<i>Daphnia magna</i>) Bayer AG, Report No.: HBF/Dm 152 Date: 16.02.1995 GLP, unpublished <i>also filed: IIA, 7.1.3.3/ 03</i>

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIA, 8.2.5/ 01	Heimbach, F.	1996a	Influence of YRC 2894 (techn.) on the reproduction rate of water fleas (<i>Daphnia magna</i>) Bayer AG, Report No.: HBF/RDM 54 Date: 05.01.1996 GLP, unpublished
IIA, 8.2.6/ 01	Anderson, J.P.E.	1995a	Influence of YRC 2894 on the growth of the green alga, <i>Selenastrum capricornutum</i> Bayer AG, Report No.: AJO/129495 Date: 06.07.1995 GLP, unpublished
IIA, 8.2.6/ 02	Anderson, J.P.E.	1995b	Influence of YRC 2894 on the growth of the green alga, <i>Scenedesmus subspicatus</i> Bayer AG, Report No.: AJO/132695 Date: 04.09.1995 GLP, unpublished
IIA, 8.2.6/ 03	Anderson, J.P.E.	1996	Influence of YRC 2894-sulfonic acid on the growth of the green alga, <i>Scenedesmus subspicatus</i> Bayer AG, Report No.: AJO/130495 Date: 27.02.1996 GLP, unpublished <i>also filed: IIA, 7.1.3.3/ 04*</i>
IIA, 8.2.6/ 04	Dorgerloh, M.	1998	KKO 2254 - Influence on the growth of the green alga, <i>Pseudokirchneriella subcapitata</i> Bayer AG, Report No.: DOM 98055 Date: 24.08.1998 GLP, unpublished
IIA, 8.2.7/ 01	Heimbach, F.	1996b	Influence of YRC 2894 (techn.) on development and emergence of larvae of <i>Chironomus riparius</i> in a water-sediment system Bayer AG, Report No.: HBF/Ch 09 Date: 03.04.1996 GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIA, 8.2.7/ 02	Bowers, L.	1996	Acute toxicity of YRC 2894 to <i>Hyalella azteca</i> under static conditions Bayer AG, Report No.: 107336 Date: 24.06.1996 GLP, unpublished
IIA, 8.2.7/ 03	Heimbach, F.	1998	Influence of YRC 2894 SC 480 on development and emergence of larvae of <i>Chironomus riparius</i> in a water-sediment system in regard to the time between application and inserting of larvae Bayer AG, Report No.: HBF/Ch 23 Date: 29.05.1998 GLP, unpublished
IIA, 8.2.7/ 04	Heimbach, F.	1997a	Influence of KKO 2254 on development and emergence of larvae of <i>Chironomus riparius</i> in a water-sediment system Bayer AG, Report No.: HBF/Ch 12 Date: 26.02.1997 GLP, unpublished
IIA, 8.2.7/ 05	Bowers, L.	1997b	Acute toxicity of KKO 2254 to <i>Hyalella azteca</i> under static conditions Bayer AG, Report No.: 107719 Date: 18.06.1997 GLP, unpublished
IIA, 8.2.8/ 01	Dorgerloh, M.	1996	YRC 2894 - toxicity (15 days) to <i>Lemna gibba</i> G3 Bayer AG, Report No.: DOM 95085 Date: 01.03.1996 GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIA, 8.3.1.1/ 01	Nengel, S.	1995a	Assessment of side effects of YRC 2894 (techn.) to the honey bee, <i>Apis mellifera</i> L., in the laboratory following the EPPO Guideline No. 170 Source: GAB Biotechnologie GmbH Bayer AG, Report No.: 95087/ 01-BLEU Date: 13.10.1995 GLP, unpublished
IIA, 8.3.2/ 01	Schmuck, R., Neumann, P.	1998	Acute effects of a spray application of YRC 2894 SC 480 on carabid beetles (<i>Poecilus cupreus</i>) under laboratory test conditions Bayer AG, Report No.: SXR/LA PC031 Date: 03.07.1998 unpublished
IIA, 8.3.2/ 02	Schmuck, R.	1998g	Acute effects of a repeated spray application of YRC 2894 SC 480 on carabid beetles (<i>Poecilus cupreus</i>) under semifield conditions Bayer AG, Report No.: SXR/HF 149 Date: 17.04.1998 GLP, unpublished
IIA, 8.3.2/ 03	Schmuck, R.	1998h	Acute effects of a spray treatment with the insecticide YRC 2894 SC 480 on lycosid spiders (<i>Pardosa prativaga</i> /spp.) under laboratory conditions Bayer AG, Report No.: SXR/SP 05 Date: 15.05.1998 GLP, unpublished
IIA, 8.3.2/ 04	Schmuck, R.	1996	Effects of YRC 2894 SC 480 on the life cycle of rove-beetles (<i>Aleochara bilineata</i>) under laboratory conditions Bayer AG, Report No.: SXR/AL 31 Date: 13.05.1996 GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIA, 8.3.2/ 05	Schmuck, R.	1998c	Effects of YRC 2894 SC 480 on the life cycle of rove-beetles (<i>Aleochara bilineata</i>) under extended laboratory conditions Bayer AG, Report No.: SXR/EL AB009 Date: 26.02.1998 GLP, unpublished
IIA, 8.3.2/ 06	Schmuck, R.	1997b	Effects of YRC 2894 SC 480 on the life cycle of the ladybird beetle (<i>Coccinella septempunctata</i>) under laboratory conditions Bayer AG, Report No.: SXR/Cs 11 Date: 27.06.1997 GLP, unpublished
IIA, 8.3.2/ 07	Schmuck, R.	1998d	Dose-related effects of YRC 2894 SC 480 on the life cycle of ladybird beetles (<i>Coccinella septempunctata</i>) under laboratory conditions Bayer AG, Report No.: SXR/Cs 15 Date: 18.06.1998 GLP, unpublished
IIA, 8.3.2/ 08	Schmuck, R.	1998f	Dose-related effects of YRC 2894 SC 480 on ladybird beetles (<i>Coccinella septempunctata</i>) under extended laboratory conditions Bayer AG, Report No.: SXR/LA Cs 012 Date: 18.06.1998 GLP, unpublished
IIA, 8.3.2/ 09	Schmuck, R.	1998e	Effects of a YRC 2894 SC 480 spray treatment on the life cycle of ladybird beetles (<i>Coccinella septempunctata</i>) under semifield conditions Bayer AG, Report No.: SXR/Cs 14 Date: 26.02.1998 GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIA, 8.3.2/ 10	Kleiner, R.	1997a	Testing toxicity to beneficial arthropods - green lacewing - <i>Chrysopa carnea</i> Steph. (extended laboratory test) following the proposal of semifield method (Block 1992) and the IOBC Guideline (Bigler & Waldburger 1988) – YRC 2894 SC 480 Bayer AG, Report No.: 97 10 48 007 Source: BioChem agrar laboratories Date: 18.12.1997 GLP, unpublished
IIA, 8.3.2/ 12	Fukuda	1998	Residues of thiacloprid in green tea Nihon Bayer Agrochem K.K. Bayer AG, Report No.: NR 98020 Date: 28.04.1998 non-GLP, unpublished
IIA, 8.3.2/ 13	Hancock, G.A.	1997b	Toxicity of YRC 2894 treated foliage to honey bees Source: Washington State University ABC Laboratories, Inc. Bayer AG, Report No.: 107738 Date: 02.05.1997 GLP, unpublished
IIA, 8.3.2/ 15	Kleiner, R.	1999a	Testing toxicity to beneficial arthropods - Ladybird – <i>Coccinella septempunctata</i> L., adults (laboratory) according to BBA Guideline VI, 23-2.1.5 (1989) und IOBC – Guideline proposal – YRC 2894 SC 480 Bayer AG, Report No.: 98 10 48 056 by BioChem Date: 19.01.1999 GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIA, 8.3.2/ 16	Candolfi, M.P.	1995	YRC 2894 SC 480: laboratory contact toxicity test with the predaceous mite, <i>Typhlodromus pyri</i> , following the method of Louis and Hetterling (1992) Source: Springborn Laboratories Bayer AG, Report No.: 95-002 1022 Date: 27.06.1995 GLP, unpublished
IIA, 8.3.2/ 17	Mead-Briggs, M.	1995a	A laboratory evaluation of the side effects of the insecticide YRC 2894 SC 480 on the parasitic wasp <i>Aphidius rhopalosiphi</i> . Source: AEU Southampton, U.K. Bayer AG, Report No.: BAY-95-2 Date: 10.04.1995 GLP, unpublished
IIA, 8.3.2/ 18	Mead-Briggs, M.	1995b	A semifield evaluation of the side effects of the insecticide YRC 2894 SC 480, applied to winter wheat, on the parasitic wasp <i>Aphidius rhopalosiphi</i> Source: AEU Southampton, U.K. Bayer AG, Report No.: BAY-95-4 Date: 23.10.1995 GLP, unpublished
IIA, 8.3.2/ 19	Kleiner, R.	1999b	Testing toxicity to beneficial arthropods - cereal aphid parasitoid – <i>Aphidius rhopalosiphi</i> (DESTEFANI-PEREZ) / pupae according to IOBC Guideline (MEAD-BRIGGS 1992) YRC 2894 SC 480 Bayer AG, Report No.: 98 10 48 069 by BioChem Date: 18.01.1999 GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIA, 8.4.1/ 01	Heimbach, F.	1994	Toxicity of YRC 2894 (techn.) to earthworms (<i>Eisenia fetida</i>) Bayer AG, Report No.: HBF/Rg 193 Date: 28.11.1994 GLP, unpublished
IIA, 8.4.2/ 01	Heimbach, F.	1995a	Influence of YRC 2894 SC 480 on the reproduction of earthworms (<i>Eisenia fetida</i>) Bayer AG, Report No.: HBF/Rg 212 Date: 06.04.1995 GLP, unpublished
IIA, 8.4.2/ 02	Fritz, R., Bornatsch, W.	1998	Degradation and metabolism of [¹⁴ C]YRC 2894 in soils under aerobic conditions Bayer AG, Report No.: PF4332 (MR-544/97) Date: 17.03.1998 GLP, unpublished <i>also filed: IIA, 7.1.1.1.1/ 01</i>
IIA, 8.4.2/ 03	Heimbach, F.	1997b	Effects of YRC SC 480 on the earthworm fauna of a grassland area Bayer AG, Report No.: HBF/RgF 40 Date: 13.05.1997 GLP, unpublished
IIA, 8.5/ 01	Anderson, J.P.E.	1995c	Influence of YRC 2894 on glucose-stimulated respiration in soils Bayer AG, Report No.: AJO/135795 Date: 15.09.1995, revised 09.02.1999 GLP, unpublished
IIA, 8.5/ 02	Anderson, J.P.E.	1995d	Influence of YRC 2894 on microbial mineralisation of nitrogen in soils Bayer AG, Report No.: AJO/135895 Date: 14.09.1995, revised 10.02.1999 GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIA, 8.7/ 01	Müller	1995	Studies on the ecological behaviour of YRC 2894 Bayer AG, Report No.: 544A/95 Date: 21.09.1995 GLP, unpublished
IIIA, 10.1/ 03	Hancock, G.A.	1997b	⇒ IIIA, 10.4.2/ 01
IIIA, 10.1.1/ 01	Grau, R.	1994	YRC 2894 techn., acute oral toxicity to Japanese quail, range finding test Bayer AG, Report No.: VW-166 Date: 17.03.1994 non-GLP, unpublished <i>filed as: IIA, 8.1.1/ 02</i>
IIIA, 10.1.1/ 02	Grau, R.	1995b	YRC 2894 techn., 5-day Dietary LC ₅₀ to Japanese quail Bayer AG, Report No.: GMU/VW-176 Date: 29.09.1995 GLP, unpublished <i>filed as: IIA, 8.1.2/ 03</i>
IIIA, 10.1.1/ 03	Schmuck, R.	1998b	Effects of a subchronic dietary exposure to YRC 2894 (techn.) on Japanese quail including effects on reproduction and health Bayer AG, Report No.: SXR/REP 07 Date: 16.02.1998 GLP, unpublished <i>filed as: IIA, 8.1.3/ 01</i>
IIIA, 10.2/ 03 Also IIIA, 9.2.3/ 03	Schäfer, H.	1998d	Predicted environmental concentrations of YRC 2894 in surface water based on EXAMS Bayer AG, Report No.: MR-331/98 Date: 23.06.1998 non-GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIIA, 10.2/04 Also IIIA,9.1.3/.6 IIA, 7.1.2/01	Henneböle, J.	1994	Adsorption/desorption of YRC 2894 on soils Bayer AG, Report No.: PF3980 Date: 09.06.1994, revised 05.12.1995 GLP, unpublished
IIIA, 10.2.1/ 01	Dorgerloh, M.	1995c	YRC 2894 SC 480 - Acute toxicity (96 hours) to bluegill (<i>Lepomis macrochirus</i>) in a static test Bayer AG, Report No.: DOM 95033 Date: 30.11.1995 GLP, unpublished
IIIA, 10.2.1/ 02	Heimbach, F.	1995b	Acute toxicity of YRC 2894 (techn.) to water fleas (<i>Daphnia magna</i>) Bayer AG, Report No.: HBF/Dm 141 Date: 16.05.1995 GLP, unpublished <i>filed as: IIA, 8.2.4/ 01</i>
IIIA, 10.2.1/ 03	Anderson, J.P.E.	1995b	Influence of YRC 2894 on the growth of the green alga, <i>Scenedesmus subspicatus</i> Bayer AG, Report No.: AJO/132695 Date: 04.09.1995 GLP, unpublished <i>filed as: IIA, 8.2.6/ 02</i>
IIIA, 10.2.1/ 04	Heimbach, F.	1997c	Influence of YRC 2894 SC 480 on development and emergence of larvae of <i>Chironomus riparius</i> in a water-sediment system Bayer AG, Report No.: HBF/Ch 14 Date: 27.02.1997 GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIIA, 10.2.1/ 05	Heimbach, F.	1998	Influence of YRC 2894 SC 480 on development and emergence of larvae of <i>Chironomus riparius</i> in a water-sediment system in regard to the time between application and inserting of larvae Bayer AG, Report No.: HBF/Ch 23 Date: 29.05.1998 GLP, unpublished <i>filed as: IIA, 8.2.7/ 03</i>
IIIA, 10.2.2/ 01	Heimbach, F.	1997d	Biological effects and fate of YRC 2894 SC 480 in outdoor microcosm ponds Bayer AG, Report No.: HBF/Bt 01 Date: 21.03.1997 GLP, unpublished
IIIA, 10.3/ 01	Krötlinger, F.	1996a	YRC 2894 - Study for acute oral toxicity in rats Bayer AG, Report No.: 25376 Date: 27.08.1996 GLP, unpublished
IIIA, 10.3/ 02	Krötlinger, F.	1998a	YRC 2894 480 SC 05776/ 0071 - Study for acute oral toxicity in rats Bayer AG, Report No.: 27081 Date: 24.03.1998 GLP, unpublished
IIIA, 10.3/ 03	Krötlinger, F.	1996c	YRC 2894 - Study for subacute oral toxicity in rats (Feeding study over 2 weeks) Bayer AG, Report No.: 25720 Date: 09.12.1996, revised 22.02.1999 GLP, unpublished
IIIA, 10.3/ 04	Krötlinger, F., Geiß, V.	1997	YRC 2894 - Investigations of subchronic toxicity in wistar rats (feeding study over 12 weeks with a subsequent recovery period over 5 weeks) Bayer AG, Report No.: PH-26239 Date: 06.05.1997 GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIIA, 10.3/ 05	Krötlinger, F.	1995c	KKO 2254 - Study for acute oral toxicity in rats Bayer AG, Report No.: 24553 Date: 01.12.1995 GLP, unpublished
IIIA, 10.3/ 06	Krötlinger, F.	1996d	WAK 6999 (YRC 2894 metabolite) - Study for acute oral toxicity in rats Bayer AG, Report No.: 24794 Date: 15.02.1996 GLP, unpublished
IIIA, 10.4.1/ 01	Kleiner, R.	1997b	Testing toxicity to honeybee - <i>Apis mellifera</i> L. (laboratory) according to EPPO guideline No. 170 (1992) - YRC 2894 SC 480 Bayer AG, Report No.: 97 10 48 005 by BioChem Date: 19.12.1997 GLP, unpublished
IIIA, 10.4.1/ 02	Graeme Bell, M.Sc	1998	YRC 2894 SC 480 - Acute toxicity to honey bees (<i>Apis mellifera</i>) Bayer AG, Report No.: BAY 175/953107 by Huntingdon Life Sciences Ltd., Huntingdon, Cambridgeshire, England Date: 07.04.1998 GLP, unpublished
IIIA, 10.4.2/ 01 Also IIIA, 10.1/ 03	Hancock, G.A.	1997b	Toxicity of YRC 2894 treated foliage to honey bees Source: Washington State University ABC Laboratories, Inc. Bayer AG, Report No.: 107738 Date: 02.05.1997 GLP, unpublished <i>filed as: IIA, 8.3.2/ 13</i>

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIIA, 10.4.3/ 01	Nengel, S.	1995b	Assessment of side effects of YRC 2894 SC 480 on the honey bee, <i>Apis mellifera</i> L. in the semifield following the EPPO guideline No. 170 Source: GAB Biotechnologie GmbH Bayer AG, Report No: 95053/ 01-BZEU Date: 15.12.1995 GLP, unpublished
IIIA, 10.4.5/ 01	Kleiner, R.	1998	Testing toxicity to honey bee - <i>Apis mellifera</i> L. (tunnel test) according to EPPO Guideline No.170 (1992) following ANPP Guideline "Tunneltest" (DEBRAY 1989) – YRC 2894 SC 480 Bayer AG , Report No.: 97 10 48 006 by BioChem Date: 28.04.1998 GLP, unpublished
IIIA, 10.5.1/ 01	Schmuck, R., Neumann, P	1998	Acute effects of a spray application of YRC 2894 SC 480 on carabid beetles (<i>Poecilus cupreus</i>) under laboratory test conditions Bayer AG, Report No.: SXR/LA PC031 Date: 03.07.1998 unpublished <i>filed as: IIA, 8.3.2/ 01</i>
IIIA, 10.5.1/ 02	Schmuck, R.	1998g	Acute effects of a repeated spray application of YRC 2894 SC 480 on carabid beetles (<i>Poecilus cupreus</i>) under semifield conditions Bayer AG, Report No.: SXR/HF 149 Date: 17.04.1998 GLP, unpublished <i>filed as: IIA, 8.3.2/ 02</i>

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIIA, 10.5.1/ 03	Schmuck, R.	1998h	Acute effects of a spray treatment with the insecticide YRC 2894 SC 480 on lycosid spiders (<i>Pardosa prativaga</i> /spp.) under laboratory conditions Bayer AG, Report No.: SXR/SP 05 Date: 15.05.1998 GLP, unpublished <i>filed as: IIA, 8.3.2/ 03</i>
IIIA, 10.5.1/ 04	Schmuck, R.	1996	Effects of YRC 2894 SC 480 on the life cycle of rove beetles (<i>Aleochara bilineata</i>) under laboratory conditions Bayer AG, Report No.: SXR/AL 31 Date: 13.05.1996 GLP, unpublished <i>filed as: IIA, 8.3.2/ 04</i>
IIIA, 10.5.1/ 05	Schmuck, R.	1998c	Effects of YRC 2894 SC 480 on the life cycle of rove beetles (<i>Aleochara bilineata</i>) under extended laboratory conditions Bayer AG, Report No.: SXR/EL AB009 Date: 26.02.1998 GLP unpublished <i>filed as: IIA, 8.3.2/ 05</i>
IIIA, 10.5.1/ 06	Schmuck, R.	1997b	Effects of YRC 2894 SC 480 on the life cycle of the ladybird beetle (<i>Coccinella septempunctata</i>) under laboratory conditions Bayer AG, Report No.: SXR/Cs 11 Date: 27.06.1997 GLP, unpublished <i>filed as: IIA, 8.3.2/ 06</i>

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIIA, 10.5.1/ 07	Schmuck, R.	1998d	Dose-related effects of YRC 2894 SC 480 on the life cycle of ladybird beetles – <i>coccinella septempunctata</i> under laboratory conditions Bayer AG, Report No.: SXR/Cs 15 Date: 18.06.1998 GLP, unpublished <i>filed as IIA, 8.3.2/ 07</i>
IIIA, 10.5.1/ 08	Schmuck, R.	1998f	Dose-related effects of YRC 2894 SC 480 on ladybird beetles - <i>coccinella septempunctata</i> under extended laboratory conditions Bayer AG, Report Nr.: SXR/Cs 012 Date: 18.06.1998 GLP, unpublished <i>filed as IIA, 8.3.2/ 08</i>
IIIA, 10.5.1/ 09	Schmuck, R.	1998e	Effects of a YRC 2894 SC 480 spray treatment on the life cycle of ladybird beetles (<i>Coccinella septempunctata</i>) under semifield conditions Bayer AG, Report No.: SXR/Cs 14 Date: 26.02.1998 GLP, unpublished <i>filed as: IIA, 8.3.2/ 09</i>
IIIA, 10.5.1/ 10	Kleiner, R.	1997a	Testing toxicity to beneficial arthropods green lacewing - <i>Chrysopa carnea</i> Steph. (extended laboratory test) following the proposal of semifield method (Block 1992) and the IOBC Guideline (Bigler & Waldburger 1988) - YRC 2894 SC 480 Bayer AG, Report No.: 97 10 48 007 Source: BioChem agrar laboratories Date: 18.12.1997 GLP, unpublished <i>filed as: IIA, 8.3.2/ 10</i>

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIIA, 10.5.1/ 11	Fukuda, T.	1998	Residues of thiacloprid in green tea Nihon Bayer Agrochem K.K. Bayer AG, Report No.: NR 98020 Date: 28.04.1998 non-GLP, unpublished <i>filed as: IIA, 8.3.2/ 12</i>
IIIA, 10.5.1/ 12	Hancock, G.A.	1997b	XXX XXX XXX ⇒ IIIA, 10.4.2/ 01
IIIA, 10.5.1/ 14	Kleiner, R.	1999a	Testing toxicity to beneficial arthropods ladybird beetle - <i>Coccinella septempunctata L.</i> , adult (laboratory test) following the BBA Guideline VI, 23- 2.1.5 (1989) und IOBC - Draft Guideline - YRC 2894 SC 480 Bayer AG, Report Nr.: 98 10 48 056 by BioChem Date: 19.01.1999 GLP, unpublished <i>filed as: IIA, 8.3.2/ 15</i>
IIIA, 10.5.1/ 15	Candolfi, M.P.	1995	YRC 2894 SC 480: Laboratory contact toxicity test with the predaceous mite, <i>Typhlodromus pyri</i> , following the method of Louis and Hetterling (1992) Source: Springborn Laboratories Bayer AG, Report No.: 95-002 1022 Date: 27.06.1995 GLP, unpublished <i>filed as: IIA, 8.3.2/ 16</i>

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIIA, 10.5.1/ 16	Mead -Briggs, M.	1995a	A laboratory evaluation of the side-effects of the insecticide YRC 2894 SC 480 on the parasitic wasp <i>Aphidius rhopalosiphi</i> Source: AEU Southampton, U.K. Bayer AG, Report No.: BAY-95-2 Date: 10.04.1995 GLP, unpublished <i>filed as: IIA, 8.3.2/ 17</i>
IIIA, 10.5.1/ 17	Mead -Briggs, M.	1995b	A semifield evaluation of the side-effects of the insecticide YRC 2894 SC 480, applied to winter wheat, on the parasitic wasp <i>Aphidius rhopalosiphi</i> Source: AEU Southampton, U.K. Bayer AG, Report No.: BAY-95-4 Date: 23.10.1995 GLP, unpublished <i>filed as: IIA, 8.3.2/ 18</i>
IIIA, 10.5.1/ 18	Kleiner, R.	1999b	Testing toxicity to beneficial arthropods cereal aphid parasitoid – <i>Aphidius rhopalosiphi</i> (DESTÉPHANI-PÉREZ) / pupae according to IOBC Guideline (MEAD-BRIGGS 1992) YRC 2894 SC 480 Bayer AG, Report No.: 98 10 48 069 by BioChem Date: 18.01.1999 GLP, unpublished <i>filed as: IIA, 8.3.2/ 19</i>
IIIA, 10.5.2/ 01	Engelhard, E.K.	1998	YRC 2894 SC 480: Field toxicity test with predacious mites (Acari: Phytoseiidae) Source: Springborn Lab Bayer AG., Report No.: 97-003-1022 Date: 24.07.1998 GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIIA, 10.5.2/ 02	Aldershof, S.A.	1997	Evaluating effects of YRC 2894 SC 480 on the predatory mite fauna (Acari: Phytoseiidae) in the field (apple orchards) Source: Mitox, NL Bayer AG, Report No.: B016AFF Date: 05.09.1997 GLP, unpublished
IIIA, 10.5.2/ 03	Grove, A.	1996	Evaluating the effect of YRC 2894 SC 480 on the predatory mite fauna (Acari: Phytoseiidae) in an apple orchard Source: Mitox, NL Bayer AG, Report No.: MB014A Date: 25.01.1996 GLP, unpublished
IIIA, 10.6.1.1/ 01	Heimbach, F.	1995c	Toxicity of YRC 2894 SC 480 to earthworms (<i>Eisenia fetida</i>) Bayer AG, Report No.: HBF/Rg 214 Date: 04.07.1995 GLP, unpublished
IIIA, 10.6.1.2/ 01	Heimbach, F.	1995a	Influence of YRC 2894 SC 480 on the reproduction of earthworms (<i>Eisenia fetida</i>) Bayer AG, Report No.: HBF/Rg 212 Date: 06.04.1995 GLP, unpublished <i>filed as: IIA, 8.4.2/ 01</i>
IIIA, 10.6.1.3/ 01	Heimbach, F.	1997b	Effects of YRC SC 480 on the earthworm fauna of a grassland area Bayer AG, Report No.: HBF/RgF 40 Date: 13.05.1997 GLP, unpublished <i>filed as: IIA, 8.4.2/ 03</i>

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
IIIA, 10.6.1.3/ 02	Fritz, R., Bornatsch, W.	1998	Degradation and metabolism of [¹⁴ C]YRC 2894 in soils under aerobic conditions Bayer AG, Report No.: PF4332 (MR-544/97) Date: 17.03.1998 GLP, unpublished <i>filed as: IIA, 8.4.2/ 02</i>
IIIA, 10.7.1/ 01	Anderson, J.P.E.	1999a	Influence of thiacloprid (YRC 2894) SC 480 on glucose stimulated respiration in soils Bayer AG, Report No.: AJO/192199 Date: 10.06.1999 GLP, unpublished <i>filed as: IIA, 8.5/ 01</i>
IIIA, 10.7.1/ 02	Anderson, J.P.E.	1999b	Influence of thiacloprid (YRC 2894) SC 480 on the microbial mineralization of nitrogen in soils Bayer AG, Report No.: AJO/192299 Date: 10.06.1999 GLP, unpublished <i>filed as: IIA, 8.5/ 02</i>
II A, 8.2.7 /06	Heimbach, F.	1997	Acute toxicity of leachate water samples of lysimeter studies on YRC 2894 to larvae of chironomus riparius Bayer AG, Report No.: HBF/CH 15, Date: 26.02.1997 GLP, unpublished
II A, 8.2.7 /07	Dorgerloh, M.; Sommer, H.	2002	Influence of thiacloprid-sulfonic acid Na-salt on development and emergence of larvae of Chironomus riparius in a water-sediment system Bayer AG, Report No.: DOM 22022, Date: 20.03.2002 GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
II A, 8.2.7	Krohn, J Graun, R	2002	Position Paper: Environmental Behaviour & Ecotoxicological Relevance of Metabolites of YRC2894 Bayer AG, Report No.: YRC2894-2002-10-11, Date: 11.10.2002 Non-GLP, unpublished
II A, 8.3.2 /21	Nienstedt, K. M.	2001	Reproduction toxicity exposing <i>Folsomia candida</i> to YRC 2894-amide Spingborn Lab., Horn, Switzerland Bayer AG, Report No.: 1022.019.641, Date: 21.08.2001 GLP, unpublished
II A, 8.3.2 /22	Moser, T.; Scheffczyk, A.	2002	Thiacloprid-sulfonic acid Na-salt: Acute and reproduction to the collembolan species <i>Folsomia candida</i> ECT GmbH, Floersheim, Germany Bayer AG, Report No.: P38CR, Date: 13.03.2002 GLP, unpublished
II A, 8.3.2 /23	Heimbach, F.	2002	Ecotoxicological risk assessment of YRC 2894-amide to soil invertebrates Bayer AG, Report No.: MO-02-004980, Date: 25.03.2002 Non GLP, unpublished
II A, 8.4.1 /02	Heimbach, F.	1998	Acute toxicity of KKO 2254 (YRC 2894-Metabolite) to earthworms (<i>Eisenia fetida</i>) Bayer AG, Report No.: HBF/RG 276, Date: 15.07.1998 GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
II A, 8.4.1 /03	Lechelt-Kunze, C.	2002	Acute toxicity of thiacloprid-sulfonic acid Na-salt to earthworms (<i>Eisenia fetida</i>) Bayer AG, Report No.: LKC/Rg 397/02, Date: 27.02.2002 GLP, unpublished
II A, 8.6 /01	Schmuck, R.; Erdelen, C.	2000	YRC 2894 - Biological activity of KKO 2254 (M02) and WAK 6999 (M30), soil metabolites of YRC 2894 Bayer AG, Report No.: OE/MEBO001, Date: 29.08.2000 Non GLP, unpublished
II A, 8.6 /02	Hancock, G. A.; Hansen, C. J.	1999	Tier 1: Seedling emergence nontarget phytotoxicity study using YRC 2894 480 SC Bayer Corporation, Stilwell, KS, USA Bayer AG, Report No.: 108837, Date: 10.03.1999 GLP, unpublished
II A, 8.6 /03	Hancock, G. A.; Hansen, C. J.	1999	Tier 1: Vegetative vigor nontarget phytotoxicity study using YRC 2894 480 SC Bayer Corporation, Stilwell, KS, USA Bayer AG, Report No.: 108838, Date: 10.03.1999 GLP, unpublished

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III A, 10.1.4 /01	Grau, R.	2001	Thiacloprid: Refined risk assessment for herbivorous birds and mammals Bayer AG, Report No.: REG01-0031, Date: 01.10.2001 Non GLP, unpublished also filed: III A, 10.3 /07
III A, 10.2.2 /02	Hommen, U.	2001	Multivariate analysis of the data of the report "biological effects and fate of YRC 2894 SC 480 in outdoor microcosm ponds" (HBF/Bt 01 of 21.03.1997) Fraunhofer-Institut fuer Umweltchemie und Oekotoxikologie, Schmallenberg, Germany Report No.: REG01-0037, Date: 30.08.2001 Non GLP, published
III A, 10.2.2 /03	Brock, T. C. M.	2002	Evaluation of the microcosm experiment described in the reports: Heimbach, F. (1997): Biological effects and fate of YRC 2894 SC 480 in outdoor microcosm ponds and Hommen U. (2001): Multivariate analysis of the data of the report Alterra Green World Research, Wageningen, Netherlands Bayer AG, Report No.: MO-02-004885, Date: 20.03.2002 Non GLP, unpublished
III A, 10.2.2 /04	Manson, P.S.	2002 a	Thiacloprid: Acute toxicity to <i>Asellus aquaticus</i> COVANCE Ltd., North Yorkshire, England Bayer AG, Report No.: 262/141, Date: 24.09.2002 GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
III A, 10.2.2 /05	Manson, P.S.	2002b	Thiacloprid: Acute toxicity to larvae of <i>Sericostoma personatum</i> (caddis fly) COVANCE Ltd., North Yorkshire, England Bayer AG, Report No.: 262/140, Date: 24.09.2002 GLP, unpublished
III A, 10.2.2 /06	Manson, P.S.	2002c	Thiacloprid: Acute toxicity to <i>Gammarus pulex</i> COVANCE Ltd., North Yorkshire, England Bayer AG, Report No.: 262/142, Date: 24.09.2002 GLP, unpublished
III A, 10.2.2	Heimbach, F	1997b	Orientierende akute Chironomidentoxizität von YRC 2894 SC 480 Bayer AG, Report No.: HBF/oCh 25, Date: 19.03.97 Non-GLP, unpublished
III A, 10.3 /07	Grau, R.	2001	Thiacloprid: Refined risk assessment for herbivorous birds and mammals Bayer AG, Report No.: REG01-0031, Date: 01.10.2001 Non GLP, unpublished also filed: III A, 10.1.4 /01
III A, 10.5.1 /20	Moll, M.	1999	Effects of thiacloprid WG36 on the parasitoid <i>Aphidius rhopalosiphii</i> (Hymenoptera, Aphidiidae), extended laboratory test - dose response test IBACON GmbH, Rossdorf, Germany Bayer AG, Report No.: 5951001, Date: 17.12.1999 GLP, unpublished

Annex point/ reference number	Author(s)	Year	Title Source (where different from company) Company, Report No. GLP or GEP status (where relevant) Published or not
III A, 10.5.1	Keppler, J	2002	Position Paper: Thiacloprid (YRC 2894) Support of Ecological Acceptable Concentration (EAC) Bayer AG, Date: 11.10.2002 Non-GLP, unpublished
III A, 10.5.1 /21	Moll, M.	2000	Effects of thiacloprid WG36 on the ladybird beetle <i>Coccinella septempunctata</i> L. (Coleoptera, Coccinellidae) in the laboratory - dose response test IBACON GmbH, Rossdorf, Germany Bayer AG, Report No.: 5952011, Date: 07.02.2000 GLP, unpublished
III A, 10.5.1 /22	Schmuck, R.	2001	Risk posed by thiacloprid to non-target arthropods Report No.: REG01-0036, Date: 15.08.2001 Non GLP, published
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III A, 10.5.1 /25	Moll, M.	1999	Effects of thiacloprid SC480 on the parasitoid <i>Aphidius rhopalosiphii</i> (Hymenoptera, Aphidiidae), extended laboratory test - dose response test - IBACON GmbH, Rossdorf, Germany Bayer AG, Report No.: 5940001, Date: 22.11.1999, Amended: 06.01.2000 GLP, unpublished

APPENDIX IV

List of uses supported by available data

THIACLOPRID

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)	Remark s (m)
					Type (d-f)	Conc. of as (i)	method kind (f-h)	growth stage season & (j)	number min max (k)	interval between applications (min)	% product min max (n)	water L/ha min max	kg as/ha min max		
Apple / Pear	EU North	not yet deter- mined	F	sucking and biting pest	SC	480 g/L	overall spray	54 - 75	1 - 2	14 days	0.02 - 0.025	1500	0.144 - 0.180	14	
Tomato (Aubergine)	EU North	not yet deter- mined	G	sucking and biting pest	SC	480 g/L	overall spray	35 - 89	3	7 - 14 days	0.025 - 0.03	1500	0.18 - 0.216	3	
Pepper	EU North	not yet deter- mined	G	sucking and biting pest	SC	480 g/L	overall spray	35 - 89	3	7 - 14 days	0.025 - 0.03	1500	0.18 - 0.216	3	
Cucumber (Courgette)	EU North	not yet deter- mined	G	sucking and biting pest	SC	480 g/L	overall spray	35 - 89	3	7 - 14 days	0.025 - 0.03	1000 - 1500	0.12 - 0.216	3	
Ornamentals	EU North	not yet deter- mined	F G	sucking and biting pest	SC	480 g/L	overall spray	xxx	1 - 3	7 - 14 days	0.025 - 0.03	1000 - 1500	0.12 - 0.216		

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)	Remark s (m)
					Type (d-f)	Conc. of as (i)	method kind (f-h)	growth stage season & (j)	number min max (k)	interval between applications (min)	% product min max (n)	water L/ha min max	kg as/ha min max		
Apple / Pear	EU South	not yet deter- mined	F	sucking and biting pest	SC	480 g/L	overall spray	54 - 75	1 - 2	14 days	0.02 - 0.025	1500	0.144 - 0.180	14	
Peach / Appricot	EU South	not yet deter- mined	F	sucking and biting pest	SC	480 g/L	overall spray	54 - 75	1 - 2	14 days	0.02	1500	0.144	14	
Tomato (Aubergine)	EU South	not yet deter- mined	F G	sucking and biting pest	SC	480 g/L	overall spray	35 - 89	2 3	14 days 7 - 14 days	0.025 - 0.03	1500	0.18 - 0.216 0.18 - 0.216	3	
Pepper	EU South	not yet deter- mined	F G	sucking and biting pest	SC	480 g/L	overall spray	35 - 89	2 3	14 days 7 - 14 days	0.025 - 0.03	1500	0.18 - 0.216 0.18 - 0.216	3	
Cucumber (Courgette)	EU South	not yet deter- mined	F G	sucking and biting pest	SC	480 g/L	overall spray	35 - 89	3 3	7 - 14 days	0.025 - 0.03	1000 1000 - 1500	0.12 - 0.144 0.12 - 0.216	3	
Melon	EU South	not yet deter- mined	F	sucking and biting pest	SC	480 g/L	overall spray	35 - 89	3	7 - 14 days	0.025 - 0.03	1000	0.12 - 0.144	3	
Watermelon	EU South	not yet deter- mined	F	sucking and biting pest	SC	480 g/L	overall spray	35 - 89	3	7 - 14 days	0.025 - 0.03	1000	0.12 - 0.144	3	
Ornamentals	EU South	not yet deter- mined	F G	sucking and biting pest	SC	480 g/L	overall spray	xxx	1 - 3	7 - 14 days	0.025 - 0.03	1000 - 1500	0.12 - 0.216	xxx	

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