

7.1.4 Further studies on adsorption and desorption in water/sediment systems and, where relevant, on the adsorption and desorption of metabolites and degradation products where the preliminary risk assessment indicates that it is necessary

No studies available. Further studies are not required, as sufficient information is provided in the water-sediment degradation studies (section 7.1.2.2.2).

Evaluation by Competent Authorities	
Use separate "evaluation boxes" to provide transparency as to the comments and views submitted	
Evaluation by Rapporteur Member State	
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Acceptability	
Remarks	

7.1.4.1 Field study on accumulation in the sediment

No study available. A field study on the accumulation of pyriproxyfen in sediment is not required, as the formation of non-extractable residues did not exceed 70% of the initial dose in the water-sediment degradation study and mineralization in the water-sediment systems was greater than 5% after 100 days.

Evaluation by Competent Authorities	
Use separate "evaluation boxes" to provide transparency as to the comments and views submitted	
Evaluation by Rapporteur Member State	
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Comments from ...	
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Materials and Methods	
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Acceptability	
Remarks	

7.2 Fate and behaviour in soil

7.2.1 Aerobic degradation in soil, initial study

See section 7.2.2.1

7.2.2 Aerobic degradation in soil, further studies

See section 7.2.2.1

7.2.2.1 The rate and route of degradation including identification of the processes involved and identification of any metabolites and degradation products in at least three soil types under appropriate conditions

Section A7.2.2.1/01 The rate and route of degradation including identification of any metabolites and degradation products in at least three soils types under appropriate conditions

1 Reference

1.1 Reference

[REDACTED] (1990a)

1.2 Data protection

Yes

1.2.1 Data owner

Sumitomo Chemical Co., Ltd.

1.2.3 Criteria for data protection

Data submitted to the MS after 13 May 2000 on existing a.s. for the purpose of its entry into Annex I

2 Guidelines and Quality Assurance

2.1 Guideline study

Yes

Environmental Protection Agency Pesticide Assessment Guidelines, Subdivision N, Section 162-1

2.2 GLP

Yes

2.3 Deviations

No

3 Materials and Methods

3.1 Test material

[REDACTED]

Official
use only

3.1.1 Lot/Batch number

[REDACTED]

3.1.2 Specification

Not applicable

3.1.3 Purity

[REDACTED]

3.1.4 Further relevant
properties

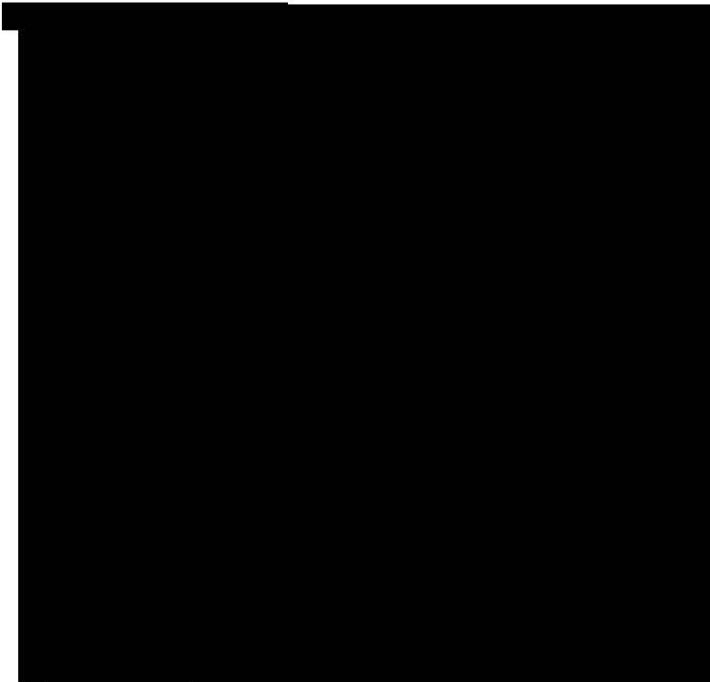
Not applicable

3.2 Reference substance

[REDACTED]

[REDACTED]





3.2.1 Initial concentration of reference substance

[Redacted]

3.3 Testing procedure

3.3.1 Test system

The metabolism and degradation of pyriproxyfen was studied in a sandy loam soil under aerobic conditions for 91 days.



3.3.2 Sampling

Duplicate soil samples were taken at 0, 1, 3, 7, 14, 28, 45, 59 and 91 days after treatment

3.3.3 Analysis



4 Results

4.1 Distribution of radioactivity



4.2 Metabolites identified

[REDACTED]

[REDACTED]

[REDACTED]

4.3 Dissipation rate

[REDACTED]

5 Applicant's Summary and Conclusion

5.1 Materials and methods

The aerobic metabolism and degradation of pyriproxyfen was studied in sandy loam soil ([REDACTED]) for 91 days

The Environmental Protection Agency Pesticide Assessment Guidelines, Subdivision N, Section 162-1 guidelines were followed without significant deviations

5.2 Results and discussion

Mean recoveries ranged between 90.6-100.7% of the applied radioactivity throughout the study. Unextractable residues increased

from 2.0% AR and 2.1% AR on day 0 in [REDACTED] to a maximum of 50% AR and 52% AR on day 28 and then decreased to 40% AR and 51% AR on day 91. CO₂ was evolved from the soil to a maximum of 50.3% AR and 42.5% AR on day 91.

[REDACTED] The calculated half-life of pyriproxyfen in soil at 25°C was 8.3 days for both labels (r^2 0.996-0.998)

5.3 Conclusion

Pyriproxyfen was readily degraded in a sandy loam soil under aerobic conditions at 25°C with a DT₅₀ of 8.3 days (12 days at 20°C) [REDACTED] the most important metabolite (max. 6.3% AR). [REDACTED] CO₂ reached a maximum of 50% AR by the end of the study

5.3.1 Reliability

[REDACTED]

5.3.2 Deficiencies

[REDACTED]

Evaluation by Competent Authorities

Use separate "evaluation boxes" to provide transparency as to the comments and views submitted

Evaluation by Rapporteur Member State

[REDACTED] [REDACTED]
[REDACTED] [REDACTED]
[REDACTED] [REDACTED]

Comments from ...

Date

Materials and Methods

Results and discussion

Conclusion

Reliability

Acceptability

Remarks



[REDACTED]	[REDACTED]		
	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]



Section A7.2.2.1/02 The rate and route of degradation including identification of any metabolites and degradation products in at least three soils types under appropriate conditions

1 Reference

Official
use only

1.1 Reference

[REDACTED] (1990b) [REDACTED]
[REDACTED]

1.2 Data protection

Yes

1.2.1 Data owner

Sumitomo Chemical Co., Ltd.

1.2.3 Criteria for data protection

Data submitted to the MS after 13 May 2000 on existing a.s. for the purpose of its entry into Annex I

2 Guidelines and Quality Assurance

2.1 Guideline study

Yes

Environmental Protection Agency Pesticide Assessment Guidelines, Subdivision N, Section 162-1

2.2 GLP

[REDACTED]
[REDACTED]

2.3 Deviations

[REDACTED]

3 Materials and Methods

3.1 Test material

[REDACTED]
[REDACTED]

3.1.1 Lot/Batch number

[REDACTED]
[REDACTED]

3.1.2 Specification

[REDACTED]

3.1.3 Purity

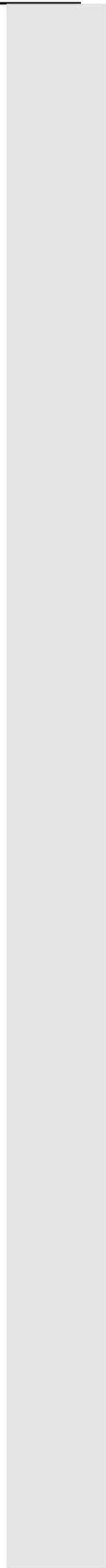
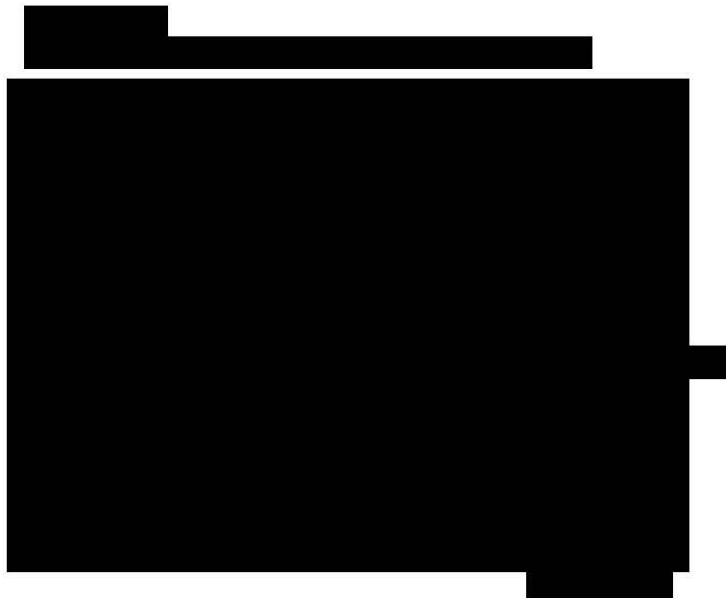
[REDACTED]
[REDACTED]

3.1.4 Further relevant properties

Not applicable

3.2 Reference substance

[REDACTED]



[REDACTED]

3.2.1 Initial concentration of reference substance [REDACTED]

3.3 Testing procedure

3.3.1 Test system

The metabolism and degradation of pyriproxyfen was studied in a sandy clay loam soil under aerobic conditions for 30 days. [REDACTED]

[REDACTED]

3.3.2 Sampling

Duplicate soil samples were taken at 0, 1, 3, 7, 14 and 30 days after treatment

3.3.3 Analysis

[REDACTED]

4 Results

4.1 Distribution of radioactivity

[REDACTED]

4.2 Metabolites identified

[REDACTED]

[REDACTED]

[REDACTED]

4.3 Dissipation rate

[REDACTED]

5 Applicant's Summary and Conclusion

5.1 Materials and methods

The aerobic metabolism and degradation of pyriproxyfen was studied in sandy clay loam soil ([REDACTED]) for 30 days

The Environmental Protection Agency Pesticide Assessment Guidelines, Subdivision N, Section 162-1 guidelines were followed without significant deviations

5.2 Results and discussion

Mean recoveries ranged between 92.3-101.6% of the applied radioactivity throughout the study. Unextractable residues increased from 0.9% AR and 0.8% AR on day 0 ([REDACTED]) to a maximum of 38.3% AR (day 14, decreasing to 34% AR on day 30) and 45.7% AR on day 30. CO₂ was evolved from the soil to a maximum of 28.2% AR and 16.9% AR on day 30. Identified soil metabolites were found in very low amounts in the soil treated [REDACTED]

[REDACTED] The calculated worst-case half-life of pyriproxyfen in soil at 25°C was 16 and 17 days [REDACTED] (r² 0.86-0.87)

5.3 Conclusion

Pyriproxyfen was readily degraded in a sandy clay loam soil under aerobic conditions at 25°C with a worst-case DT₅₀ of 16-17 days (24-25 days at 20°C). [REDACTED]

[REDACTED] CO₂ reached a maximum of 28.2% AR by the end of the study

5.3.1 Reliability

[REDACTED]

5.3.2 Deficiencies

[REDACTED]



[REDACTED]	[REDACTED]		
	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	■	■	■
[REDACTED]	■	■	■
[REDACTED]	[REDACTED]	[REDACTED]	
[REDACTED]	■	■	■
[REDACTED]	■	■	■



Section A7.2.2.1/03&04 The rate and route of degradation including identification of any metabolites and degradation products in at least three soils types under appropriate conditions

1 Reference

Official
use only

1.1 Reference

[REDACTED] (1994) [REDACTED]

Addendum:

[REDACTED] 1996 [REDACTED]

1.2 Data protection

Yes

1.2.1 Data owner

Sumitomo Chemical Co., Ltd.

1.2.3 Criteria for data protection

Data submitted to the MS after 13 May 2000 on existing a.s. for the purpose of its entry into Annex I

2 Guidelines and Quality Assurance

2.1 Guideline study

Yes

Environmental Protection Agency Pesticide Assessment Guidelines, Subdivision N, Section 162-1

2.2 GLP

[REDACTED]

2.3 Deviations

[REDACTED]

3 Materials and Methods

3.1 Test material

[REDACTED]

3.1.1 Lot/Batch number

[REDACTED]

3.1.2 Specification

[REDACTED]

3.1.3 Purity

[REDACTED]

3.1.4 Further relevant
properties

[REDACTED]
Not applicable

3.2 Reference substance

[REDACTED]

[REDACTED]

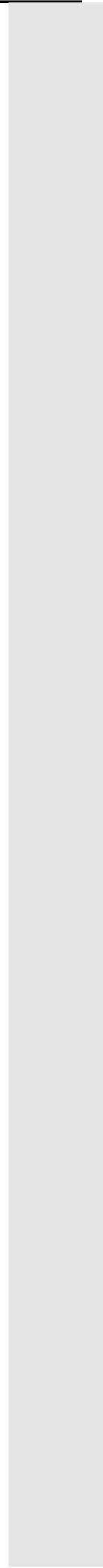
[REDACTED]

[REDACTED]





3.2.1 Initial concentration of [redacted]
reference substance



3.3 Testing procedure

3.3.1 Test system

The metabolism and degradation of pyriproxyfen was studied in a sandy loam soil under aerobic conditions for up to 189 days.

[REDACTED]

3.3.2 Sampling

Duplicate soil samples were taken at 0, 1, 3, 7, 14, 30, 59, 92, 120, 149 and 189 days [REDACTED] and 0, 1, 3, 7, 14, 31, 62, 94, 122, 150 and 180 days ([REDACTED]) after treatment

3.3.3 Analysis

[REDACTED]

4 Results

4.1 Distribution of radioactivity

Mean recoveries ranged from 94.2-108.2% of the applied radioactivity throughout the study.

[REDACTED]

4.2 Metabolites identified

[REDACTED]

4.3 Dissipation rate

[REDACTED]

[REDACTED]

5 Applicant's Summary and Conclusion

5.1 Materials and methods

The aerobic metabolism and degradation of pyriproxyfen was studied in a sandy loam soil ([REDACTED]) for up to 189 days

The Environmental Protection Agency Pesticide Assessment Guidelines, Subdivision N, Section 162-1 guidelines were followed without significant deviations

5.2 Results and discussion

Mean recoveries ranged from 94.2-108.2% of the applied radioactivity throughout the study. CO₂ was evolved from the soil reaching a maximum of 31.1% of the applied radioactivity at day 189 ([REDACTED]) and 13.9% of the applied radioactivity at day 180 ([REDACTED]). Pyriproxyfen degraded to 4.5% AR after 189 days ([REDACTED]) and 5% AR after 180 days ([REDACTED]).

The calculated half-life of pyriproxyfen in soil at 25°C was 13 and 6.3 days ([REDACTED]) (r² 0.95 and 0.99). The worst-case calculated half-life ([REDACTED]) in soil at 25°C was 47 and 24 days respectively (r² 0.86 and 0.97)

5.3 Conclusion

Pyriproxyfen was readily degraded in a sandy loam soil under aerobic conditions at 25°C with a DT₅₀ of 6.3-13 days (9.4-19 days at 20°C).

Worst-case DT₅₀ values ([REDACTED]) were 24 and 47 days respectively at 25°C (36 and 70 days at 20°C). ([REDACTED]) the only other identified metabolite and was

found in very low amounts (max. 0.4% AR). CO₂ reached a maximum of 31.1% AR by the end of the study

5.3.1 Reliability



5.3.2 Deficiencies



Evaluation by Competent Authorities

Use separate "evaluation boxes" to provide transparency as to the comments and views submitted

Evaluation by Rapporteur Member State

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

Comments from ...

Date

Materials and Methods

Results and discussion

Conclusion

Reliability

Acceptability

Remarks

[REDACTED]	[REDACTED]
[REDACTED]	
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

[REDACTED]

[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

[REDACTED]

[REDACTED]	[REDACTED]			[REDACTED]			[REDACTED]		
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]

Section A7.2.2.1/05 The rate and route of degradation including identification of any metabolites and degradation products in at least three soils types under appropriate conditions

1 Reference

Official
use only

1.1 Reference

[REDACTED] (2001) [REDACTED]

1.2 Data protection

Yes

1.2.1 Data owner

Sumitomo Chemical Co., Ltd.

1.2.3 Criteria for data protection

Data submitted to the MS after 13 May 2000 on existing a.s. for the purpose of its entry into Annex I

2 Guidelines and Quality Assurance

2.1 Guideline study

Yes

SETAC Procedures for Assessing the Environmental Fate and Ecotoxicity of Pesticides, Section 1.1 (March 1995)

2.2 GLP

[REDACTED]

2.3 Deviations

[REDACTED]

3 Materials and Methods

3.1 Test material

[REDACTED]

3.1.1 Lot/Batch number

[REDACTED]

3.1.2 Specification

[REDACTED]

3.1.3 Purity

[REDACTED]

3.1.4 Further relevant properties

Not applicable

3.2 Reference substance

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

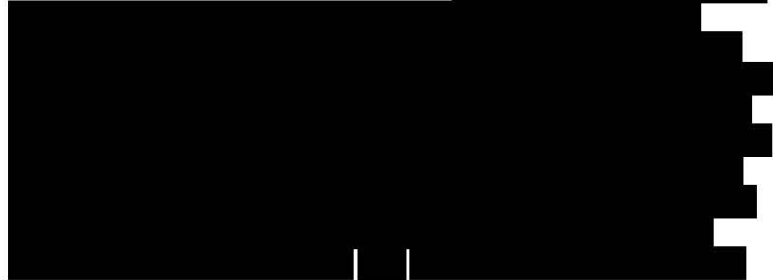


3.2.1 Initial concentration of reference substance

3.3 Testing procedure

3.3.1 Test system

The aerobic metabolism and degradation of pyriproxyfen was studied in four European soils for up to 90 days.



3.3.2 Sampling

Single soil samples were taken at 0, 1, 3, 7, 14, 30, 62 and 90 days after treatment

3.3.3 Analysis

[Redacted]

4 Results

4.1 Distribution of radioactivity

Total recoveries ranged from 92.8-101.3% of the applied radioactivity throughout the study.

[Redacted]

4.2 Metabolites identified

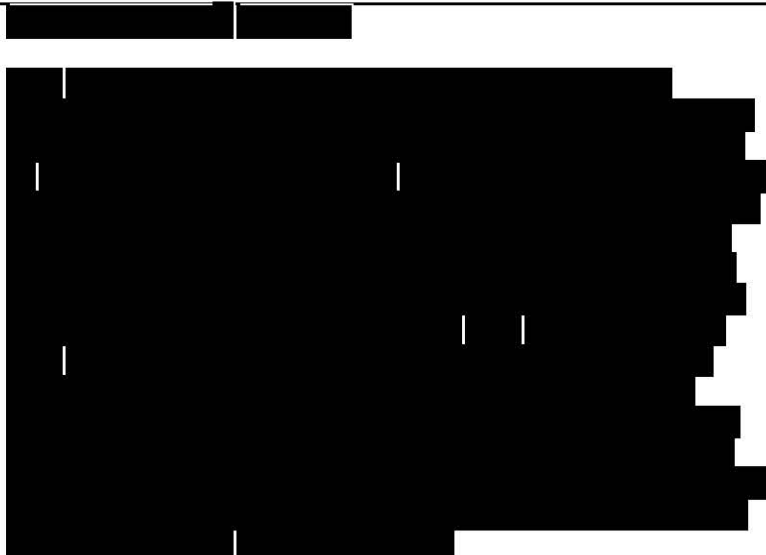
Pyriproxyfen degraded to 3.2-4.6% AR after 90 days.

[Redacted]

4.3 Dissipation rate

DT₅₀ values for pyriproxyfen were calculated using a two or three phase exponential model and reported as 1.1-4.7 days (r^2 0.993- >0.999). DT₅₀ values were also calculated by the CTB during the EU evaluation of pyriproxyfen under 91/414/EEC and are reported in Volume 3, Annex B of the DAR (November 2005).

[Redacted]



5 Applicant's Summary and Conclusion

5.1 Materials and methods The aerobic metabolism and degradation of pyriproxyfen was studied in four European soils for up to 90 days

SETAC Procedures for Assessing the Environmental Fate and Ecotoxicity of Pesticides, Section 1.1 (March 1995) were followed without significant deviations

5.2 Results and discussion Total recoveries ranged from 92.8-101.3% of the applied radioactivity throughout the study. Radioactivity extractable with MeOH/water and acetone/1% acetic acid decreased from 99-101% of applied radioactivity at day 0, to 4.3-7.6% at day 90. Most of the extractable radioactivity was found in the neutral extract (extraction with acidic solvent released $\leq 4.1\%$ AR). Soil bound residues reached maximum levels of 33-52% of applied radioactivity on day 7-62 and were 30-49% AR on day 90. CO₂ was evolved from the soil reaching a maximum of 40.4-61% of the applied radioactivity at day 90. Pyriproxyfen degraded to 3.2-4.6% AR after 90 days.

the most important soil metabolites reaching a maximum of 1.1-8.6% AR and 2.3-6.2% AR, respectively after 1-7 days, decreasing to $\leq 0.3\%$ and 0.6-2.4% AR, respectively after 14 days and $\leq 0.2\%$ AR and 0.2-0.7% AR, respectively by the end of the study. the only other identified soil metabolites and were found in low amounts reaching a maximum of 0.5% AR and 0.8% AR, respectively. The calculated half-life of pyriproxyfen at 20°C was 4.4, 6.1, 3.7 and 2.8 days, respectively (r^2 0.94-0.99). The calculated worst-case half-life at 20°C was 28, 24 and 30 days, respectively (r^2 0.74, 0.85 and 0.82).

5.3 Conclusion Pyriproxyfen was readily degraded in four European soils under aerobic conditions at 20°C with a DT₅₀ of 2.8-6.1 days. (max. 8.6% AR) and (max. 6.2% AR) were the most important metabolites. Worst-case DT₅₀ values for were 24-30 days at 20°C. and were the only other identified soil metabolites and were found in low amounts (max. 0.5% AR and 0.8% AR, respectively). CO₂ reached a maximum of 40.4-61% AR by the end of the study

5.3.1 Reliability



5.3.2 Deficiencies



Evaluation by Competent Authorities

Use separate "evaluation boxes" to provide transparency as to the comments and views submitted

Evaluation by Rapporteur Member State

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

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[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

Comments from ...

Date

Materials and Methods

Results and discussion

Conclusion

Reliability

Acceptability

Remarks

[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED] [REDACTED] [REDACTED]	[REDACTED] [REDACTED] [REDACTED]	[REDACTED] [REDACTED]	[REDACTED] [REDACTED] [REDACTED]
[REDACTED]	[REDACTED] [REDACTED] [REDACTED]	[REDACTED] [REDACTED] [REDACTED]	[REDACTED] [REDACTED]	[REDACTED] [REDACTED] [REDACTED]

[REDACTED]

Section A7.2.2.1/06 The rate and route of degradation including identification of any metabolites and degradation products in at least three soils types under appropriate conditions

1 Reference

Official
use only

1.1 Reference

[REDACTED] (2005) [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

1.2 Data protection

Yes

1.2.1 Data owner

Sumitomo Chemical Co., Ltd.

1.2.3 Criteria for data protection

Data submitted to the MS after 13 May 2000 on existing a.s. for the purpose of its entry into Annex I

2 Guidelines and Quality Assurance

2.1 Guideline study

No

Not applicable (calculation only)

2.2 GLP

[REDACTED]
[REDACTED]

2.3 Deviations

[REDACTED]

3 Materials and Methods

3.1 Test material

Not applicable (calculation only)

3.1.1 Lot/Batch number

Not applicable (calculation only)

3.1.2 Specification

Not applicable (calculation only)

3.1.3 Purity

Not applicable (calculation only)

3.1.4 Further relevant properties

Not applicable

3.2 Reference substance

Not applicable (calculation only)

3.2.1 Initial concentration of reference substance

Not applicable (calculation only)

3.3 Testing procedure

3.3.1 Test system

DT₅₀ and DT₉₀ values for [REDACTED] were estimated using a series of kinetic analysis methods taking into consideration the recommendations made by the working group on FOCUS Kinetics.

The calculations were based on data from three soils in the aerobic soil metabolism studies with pyriproxyfen [REDACTED]

[REDACTED] A degradation pathway was established in 3 steps.

[REDACTED]

4 Results

4.1 Estimated DT₅₀ / DT₉₀

[REDACTED]

5 Applicant's Summary and Conclusion

5.1 Materials and methods

DT₅₀ and DT₉₀ values [REDACTED] were estimated using a series of kinetic analysis methods taking into consideration the recommendations made by the working group on FOCUS Kinetics. The calculations were based on data from three soils in the aerobic soil metabolism studies with pyriproxyfen [REDACTED]

5.2 Results and discussion

Compartment model analysis as recommended by the FOCUS Kinetics working group gave the most reliable results for kinetic fitting. The calculated first order DT₅₀ values were 25, 14 and 0.4 days at 25°C in the three soils, respectively (37, 21 and 0.4 days at 20°C)

5.3 Conclusion















[REDACTED] degraded in three different laboratory studies performed with radiolabelled pyriproxyfen with first order DT₅₀ values of 25, 14 and 0.4 days at 25°C (37, 21 and 0.4 days at 20°C)

5.3.1 Reliability

1

5.3.2 Deficiencies

No

Evaluation by Competent Authorities	
Use separate "evaluation boxes" to provide transparency as to the comments and views submitted	
Evaluation by Rapporteur Member State	
	
	
	
	
	
	
	
Comments from ...	
Date	
Materials and Methods	
Results and discussion	
Conclusion	
Reliability	
Acceptability	
Remarks	

[REDACTED]									
[REDACTED]	[REDACTED]			[REDACTED]			[REDACTED]		
	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]

7.2.2.2 Field soil dissipation and accumulation

Section A7.2.2.2/01&02 Field soil dissipation and accumulation

1 Reference

Official
use only

1.1 Reference

(1995) [Redacted]

Addendum:

[Redacted]

1.2 Data protection

Yes

1.2.1 Data owner

Sumitomo Chemical Co., Ltd.

1.2.3 Criteria for data protection

Data submitted to the MS after 13 May 2000 on existing a.s. for the purpose of its entry into Annex I

2 Guidelines and Quality Assurance

2.1 Guideline study

Yes

Environmental Protection Agency Pesticide Assessment Guidelines, Subdivision N, Section 164-1

2.2 GLP

[Redacted]

[Redacted]

2.3 Deviations

[Redacted]

3 Materials and Methods

3.1 Test material

[Redacted]

3.1.1 Lot/Batch number

[Redacted]

3.1.2 Specification

[Redacted]

3.1.3 Purity

[Redacted]

3.1.4 Further relevant properties

Not applicable

3.2 Reference substance

[REDACTED]

3.2.1 Initial concentration of reference substance Not specified

3.3 Testing procedure

3.3.1 Test system

Formulated pyriproxyfen ([REDACTED]) was applied as two applications at 14 day intervals to bare ground [REDACTED] at a rate of 148 g pyriproxyfen/ha [REDACTED] per application. [REDACTED] The applications and test site location were based on the proposed use pattern for a cotton crop and the test plot was sprinkler irrigated during the trial as appropriate for cotton. An untreated control plot was included in the study

3.3.2 Sampling

Three soil cores (0-90 cm depth) were removed from each of five sections within the treated plot and from the untreated control plot on the day prior to the first application, immediately after the first application, on the day of the second application and at 1, 3, 7, 10, 14,

28 and 42 days following the second application. Composite samples were stored frozen until extraction and analysis

All analyses [redacted] were conducted within the validated storage interval of 29 and 218 days. [redacted]

[redacted]

3.3.3 Analysis

[redacted]

4 Results

4.1 Distribution of residues

[redacted]

4.2 Dissipation rate

[redacted]

5 Applicant's Summary and Conclusion

5.1 Materials and methods

A field soil dissipation study for pyriproxyfen was conducted using bare soil plots [redacted]

The Environmental Protection Agency Pesticide Assessment Guidelines, Subdivision N, Section 164-1 guidelines were followed without significant deviations

5.2 Results and discussion

Residues of pyriproxyfen were confined to the top 0-7.5 cm soil layer and were 0.06 mg/kg on the day of the first application and 0.15 mg/kg on the day of the second application. After day 10, residues were below the limit of detection (<0.01 mg/kg). Mean concentrations of [redacted] and [redacted] above the limit of detection (0.01 mg/kg) were not found at any time or at any depth in the soil, with the exception of one detection of [redacted] (0.01 mg/kg) at 0-7.5 cm depth, 10 days after the second application. Calculated first order DT₅₀ and DT₉₀

values for pyriproxyfen were 3.5 days and 11.7 days respectively (r^2 0.9248)

5.3 Conclusion

Following two spray applications to bare soil [redacted] residues of pyriproxyfen were confined to the topsoil layer and were 0.06 mg/kg and 0.15 mg/kg on the day of the first and second treatment, respectively. Residues were detected up to 10 days after the second treatment only (first order DT_{50} 3.5 days). With the exception of one detection of [redacted] in the topsoil (mean 0.01 mg/kg) 10 days after the second application, mean concentrations of metabolites [redacted] and [redacted] were below the limit of detection (<0.01 mg/kg)

5.3.1 Reliability

■

5.3.2 Deficiencies

■

Evaluation by Competent Authorities

Use separate "evaluation boxes" to provide transparency as to the comments and views submitted

Evaluation by Rapporteur Member State

[redacted]

[redacted]

[redacted]

■

[redacted]

■

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

Comments from ...

Date

Materials and Methods

Results and discussion

Conclusion

Reliability

Acceptability

Remarks

[REDACTED]	[REDACTED]		
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]

Section A7.2.2.2/03&04 Field soil dissipation and accumulation

1 Reference

Official
use only

1.1 Reference

[REDACTED]

Addendum:

[REDACTED] (2000b)
[REDACTED]

1.2 Data protection

Yes

1.2.1 Data owner

Sumitomo Chemical Co., Ltd.

1.2.3 Criteria for data protection

Data submitted to the MS after 13 May 2000 on existing a.s. for the purpose of its entry into Annex I

2 Guidelines and Quality Assurance

2.1 Guideline study

Yes

Environmental Protection Agency Pesticide Assessment Guidelines, Subdivision N, Section 164-1

2.2 GLP

[REDACTED]

[REDACTED]

2.3 Deviations

[REDACTED]

3 Materials and Methods

3.1 Test material

[REDACTED]

3.1.1 Lot/Batch number

[REDACTED]

3.1.2 Specification

[REDACTED]

3.1.3 Purity

[REDACTED]

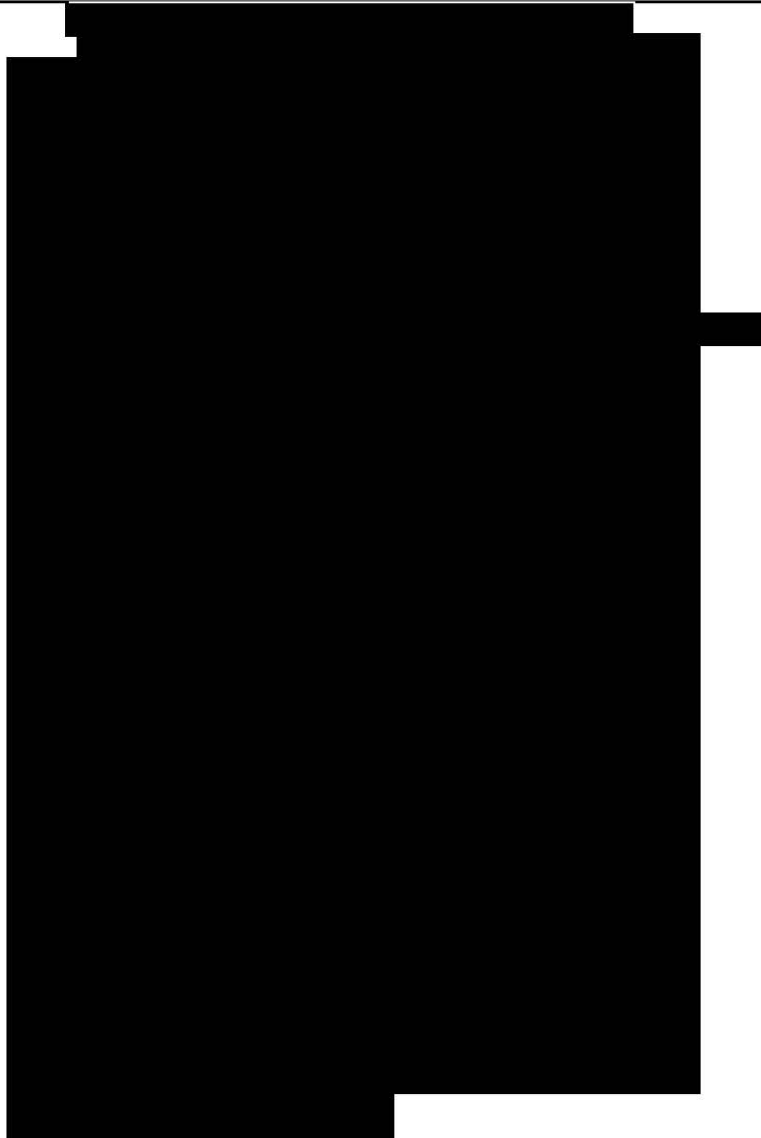
3.1.4 Further relevant properties

Not applicable

3.2 Reference substance

[REDACTED]

[REDACTED]



3.2.1 Initial concentration of reference substance

3.3 Testing procedure

3.3.1 Test system

Formulated pyriproxyfen () was applied as three applications at 14 day intervals to bare soil between the rows of an established apple orchard at a rate of 124 g pyriproxyfen/ha per application. The applications were made in May and June and were based on the proposed use pattern for apples.

The test plot was sprinkler irrigated during the trial as appropriate for an apple orchard. An untreated control plot was included in the study

3.3.2 Sampling

Three soil cores (0-90 cm depth) were removed from each of five sections within the treated plot and from the untreated control plot on the day prior to the first application, on the day of the first application, on the day of the second application and on the day of the third application. Soil cores were then collected at 1, 3, 7, 9, 14, 30, 42 and 62 days following the third (final) application. Composite samples were stored frozen until extraction and analysis

All relevant analyses [redacted] were conducted within the validated storage interval. [redacted]

3.3.3 Analysis

[redacted]

4 Results

4.1 Distribution of residues

[redacted]

4.2 Dissipation rate

[redacted]

5 Applicant's Summary and Conclusion

5.1 Materials and methods

A field soil dissipation study for pyriproxyfen was conducted using bare soil plots in an apple orchard [redacted]

The Environmental Protection Agency Pesticide Assessment Guidelines, Subdivision N, Section 164-1 guidelines were followed without significant deviations

5.2 Results and discussion

Residues of pyriproxyfen were mostly confined to the top 0-7.5 cm soil layer and were 0.05, 0.05 and 0.12 mg/kg on the day of the first, second and third application respectively. Residues were detected in the topsoil up to 30 days after the third application. [redacted] was not

Table A7.2.2.2-04: Residues of pyriproxyfen and its metabolites PYPAC and 4'-OH-Pyr (mean

[REDACTED]	[REDACTED]		
	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

[REDACTED]

Section A7.2.2.2/05&06 Field soil dissipation and accumulation

1 Reference

Official
use only

1.1 Reference

[REDACTED] (1997b) [REDACTED]

Addendum:

[REDACTED] (2000c) [REDACTED]

1.2 Data protection

Yes

1.2.1 Data owner

Sumitomo Chemical Co., Ltd.

1.2.3 Criteria for data protection

Data submitted to the MS after 13 May 2000 on existing a.s. for the purpose of its entry into Annex I

2 Guidelines and Quality Assurance

2.1 Guideline study

Yes

Environmental Protection Agency Pesticide Assessment Guidelines, Subdivision N, Section 164-1

2.2 GLP

[REDACTED]

2.3 Deviations

[REDACTED]

3 Materials and Methods

3.1 Test material

[REDACTED]

3.1.1 Lot/Batch number

[REDACTED]

3.1.2 Specification

[REDACTED]

3.1.3 Purity

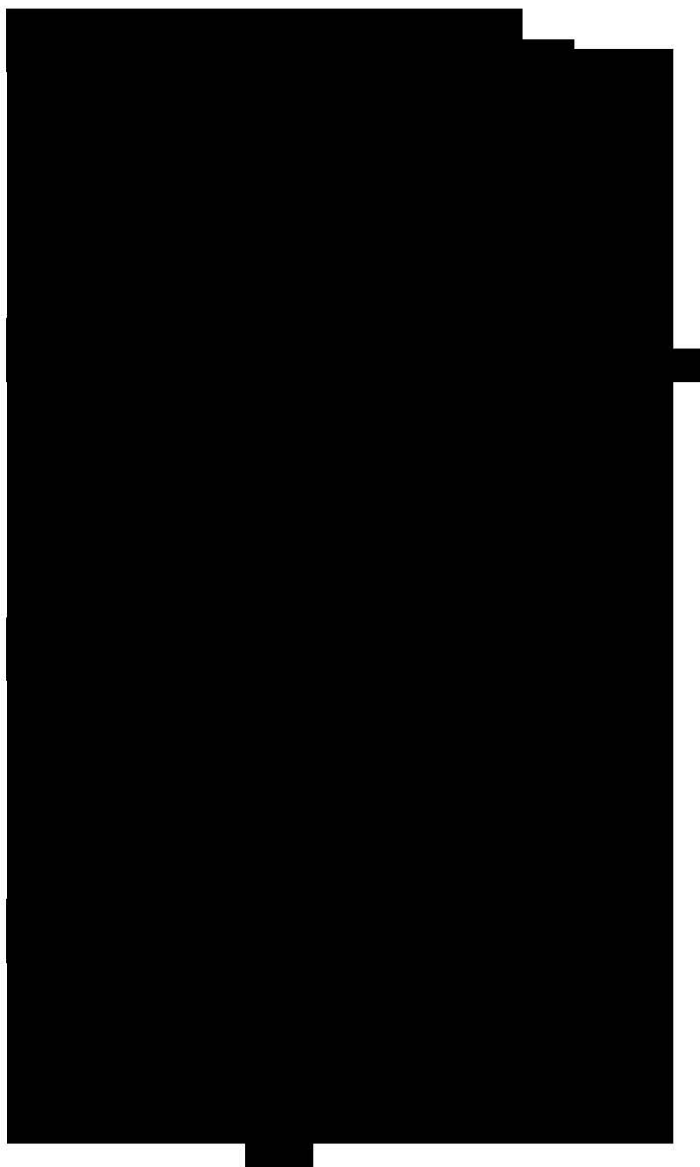
[REDACTED]

3.1.4 Further relevant properties

Not applicable

3.2 Reference substance

[REDACTED]



3.2.1 Initial concentration of reference substance

3.3 Testing procedure

3.3.1 Test system

Formulated pyriproxyfen [redacted] was applied as three applications at 14 day intervals to bare soil between the rows of an established apple orchard [redacted] at a rate of 126 g pyriproxyfen/ha [redacted] per application. The applications were made in May and June [redacted] and were based on the proposed use pattern for apples. [redacted]

[redacted] The test plot was sprinkler irrigated during the trial as appropriate for an apple orchard. An untreated control plot was included in the study

3.3.2 Sampling

Three soil cores (0-90 cm depth) were removed from each of five sections within the treated plot and from the untreated control plot on the day prior to the first application, on the day of the first application, on the day of the second application and on the day of the third application. Soil cores were then collected at 1, 3, 7, 10, 14, 28, 42 and 60 days following the third (final) application. Composite samples

were stored frozen until extraction and analysis

All post third application analyses of the top three soil segments were conducted within 49 days of frozen storage for pyriproxyfen (except for samples taken on the day of the third application, which were analysed 100 days after sampling) and within 100 days for [REDACTED]

[REDACTED]

3.3.3 Analysis

[REDACTED]

4 Results

4.1 Distribution of residues

[REDACTED]

4.2 Dissipation rate

[REDACTED]

5 Applicant's Summary and Conclusion

5.1 Materials and methods

A field soil dissipation study for pyriproxyfen was conducted using bare soil plots in an apple orchard [REDACTED]

The Environmental Protection Agency Pesticide Assessment Guidelines, Subdivision N, Section 164-1 guidelines were followed without significant deviations

[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

Comments from ...

Date

Materials and Methods

Results and discussion

Conclusion

Reliability

Acceptability

Remarks

