Pyriproxyfen: CAS number 95737-68-1 January 2012

Doc IIIA RMS: NL

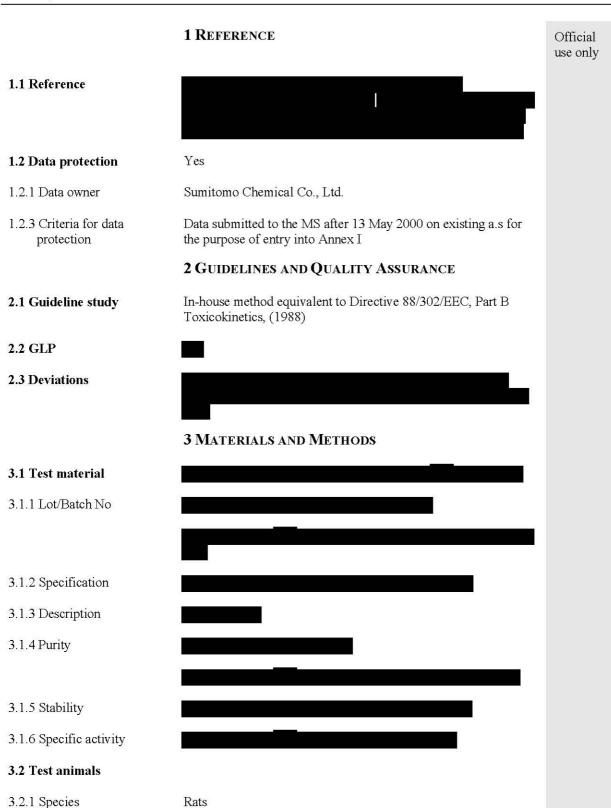
60 / 293

## **6.2.3** Tissue distribution in rats (high dose)

#### Section 6.2.3/01

## **Tissue distribution in rats (high dose)**

#### Annex point IIA 6.2

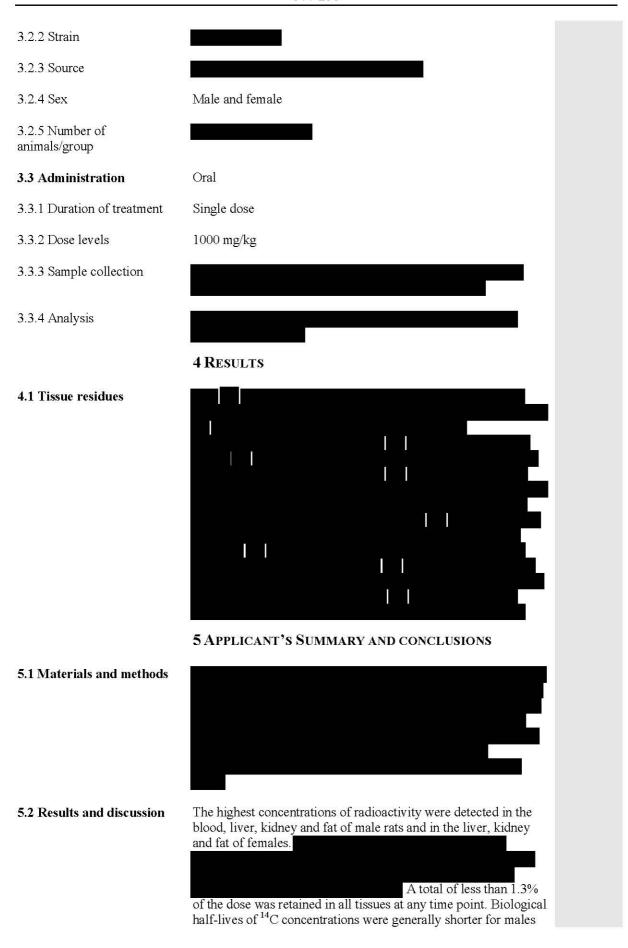


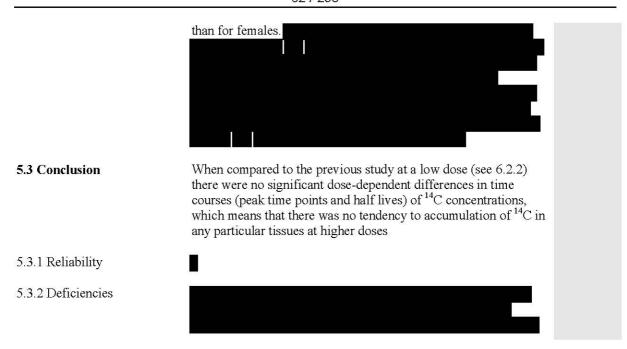
Pyriproxyfen: CAS number 95737-68-1

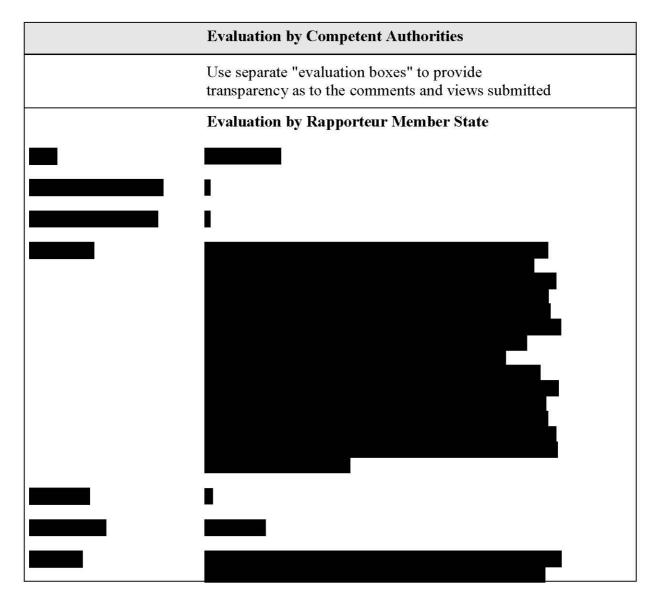
Doc IIIA

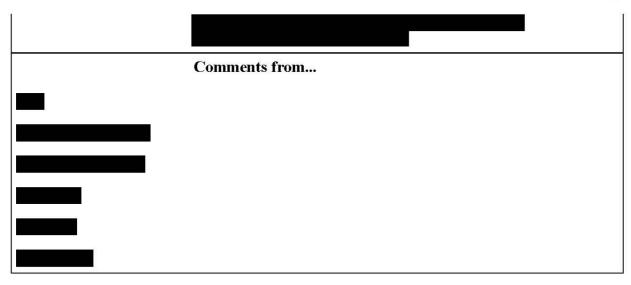
January 2012

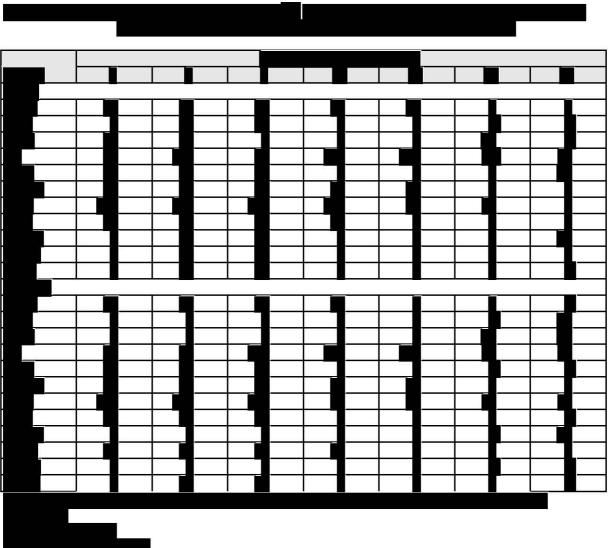
RMS: NL

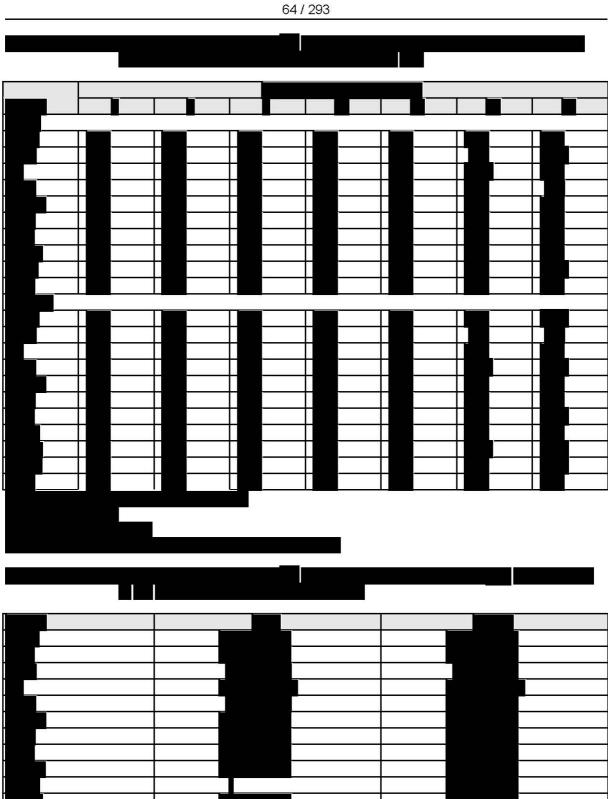












# 6.2.4 Absorption, distribution, metabolism and excretion in rats (pyridyl-2,6-14C)

Section 6.2.4/01 Absorption, distribution, metabolism and excretion in rats (pyridyl-2,6-<sup>14</sup>C)

Annex point 11A 0.2		
	1 Reference	Official use only
1.1 Reference		
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 entry into Annex I $$	
	2 Guidelines and Quality Assurance	
2.1 Guideline study	In-house method equivalent, in part, to US-EPA Guidelines: Subdivision F. Rat Metabolism Series 85-1, Directive 88/302/EEC, Part B Toxicokinetics	
2.2 GLP		
2.3 Deviations		
	3 MATERIALS AND METHODS	
3.1 Test material		
3.1.1 Lot/Batch No		
2.1.2.9		
3.1.2 Specification		
3.1.3 Description		
3.1.4 Purity		
3.1.5 Stability		



## 4.3 Identity of metabolites



**5 APPLICANT'S SUMMARY AND CONCLUSIONS** 

#### 5.1 Materials and methods



### 5.2 Results and discussion

Pyriproxyfen was extensively metabolised

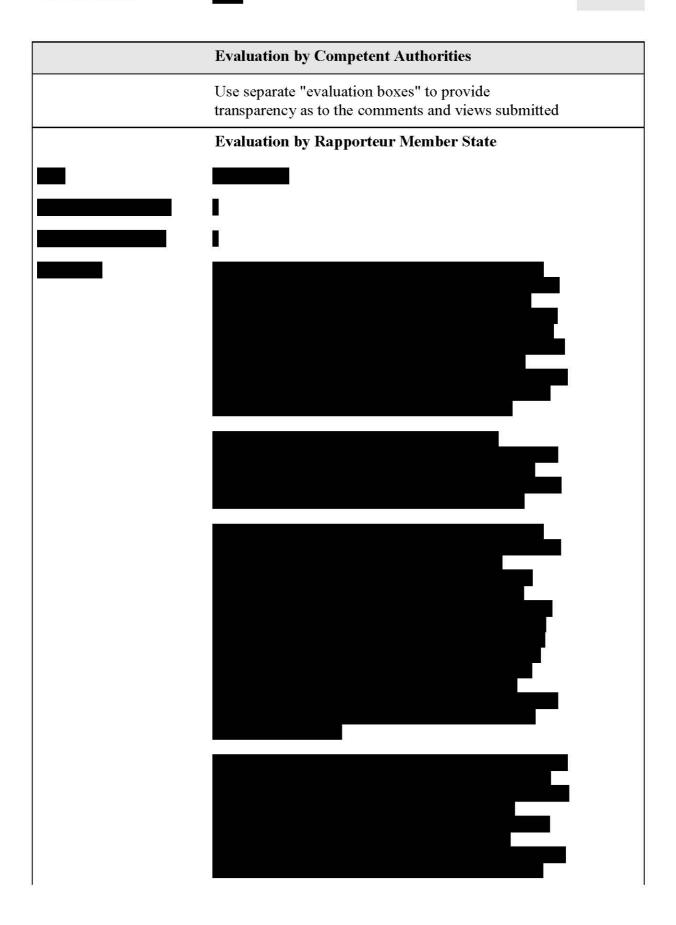
Unchanged pyriproxyfen was present in both excreta.

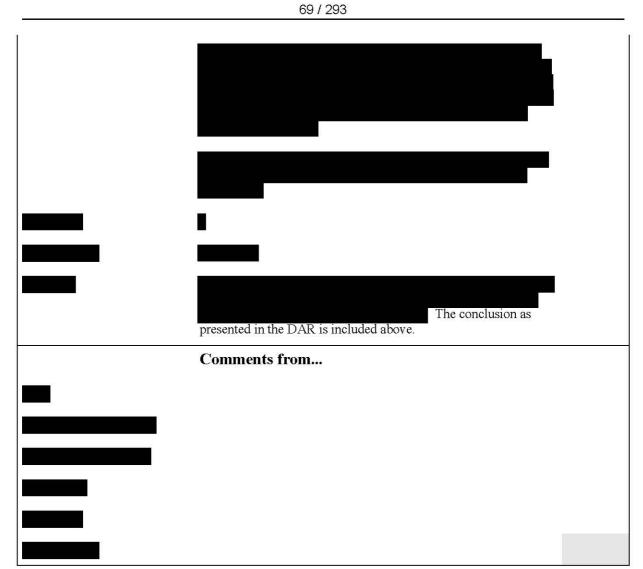
#### 5.3 Conclusion

Pyriproxyfen was rapidly excreted in rats, mainly in the faeces. Tissue residues 7 days after dosing were low in all dose groups.

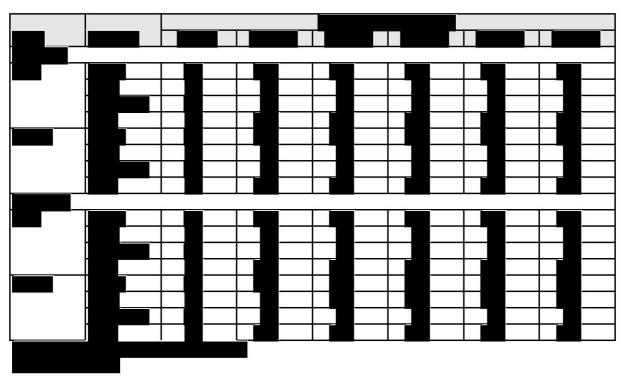
### 5.3.1 Reliability

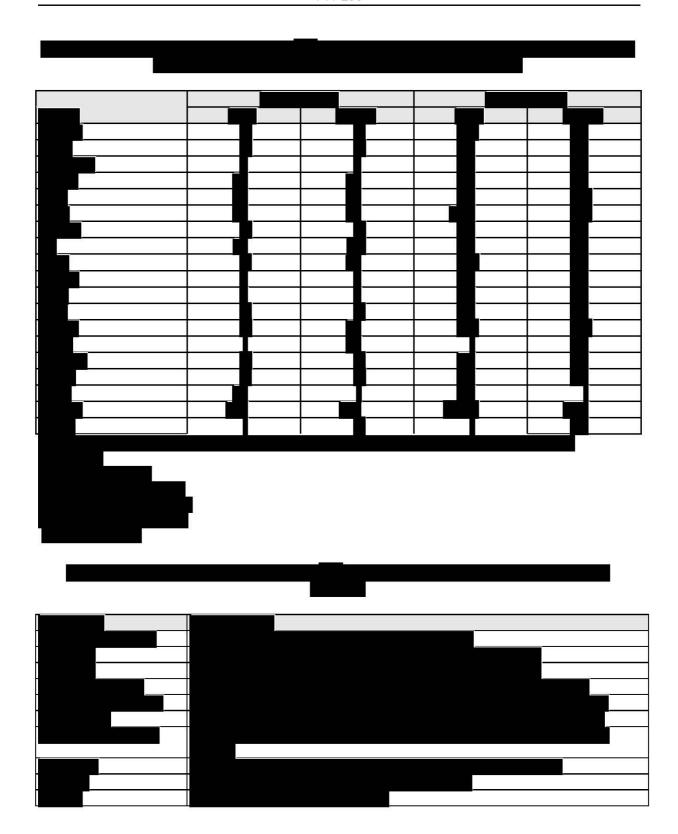
5.3.2 Deficiencies



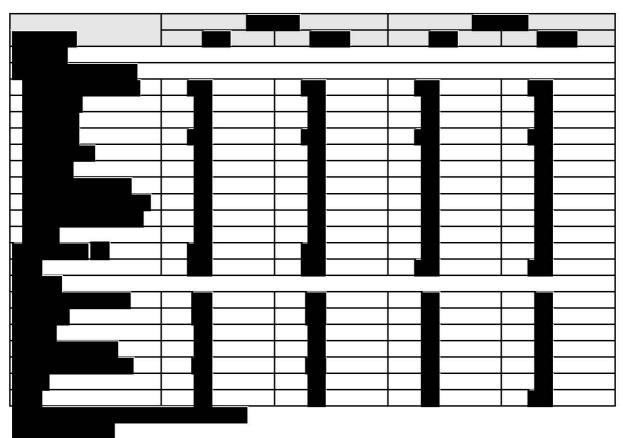










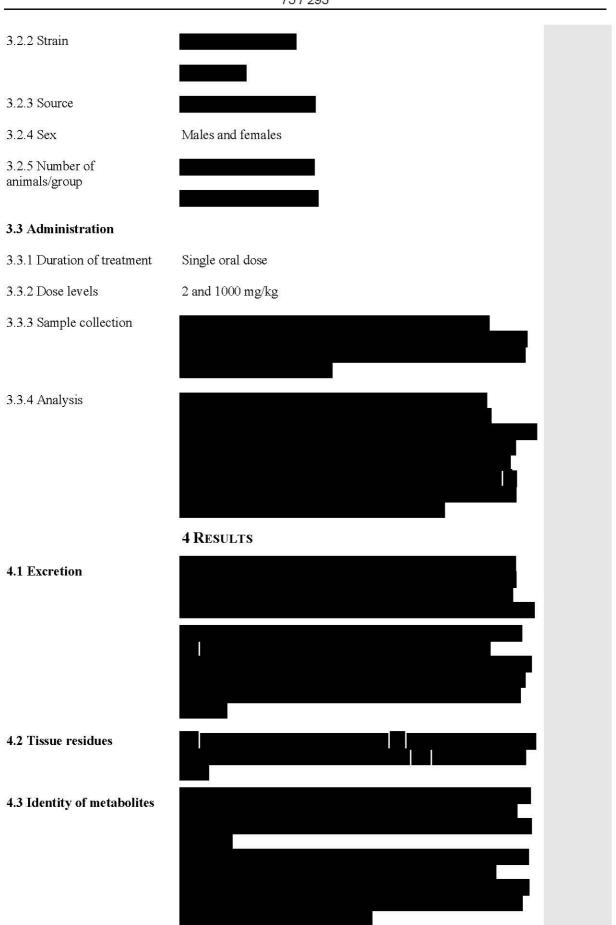


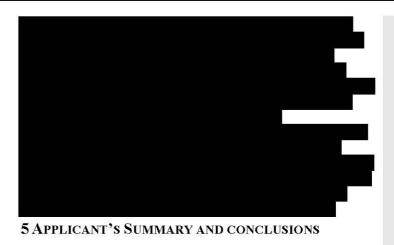


## 6.2.5 Comparative metabolism study of pyriproxyfen in rats and mice

Section 6.2.5/01 Comparative metabolism study of pyriproxyfen in rats and mice





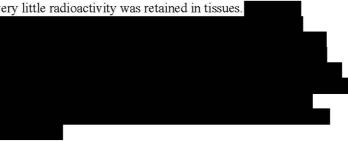


#### 5.1 Materials and methods



#### 5.2 Results and discussion

Radioactivity was rapidly eliminated by both rats and mice and very little radioactivity was retained in tissues.



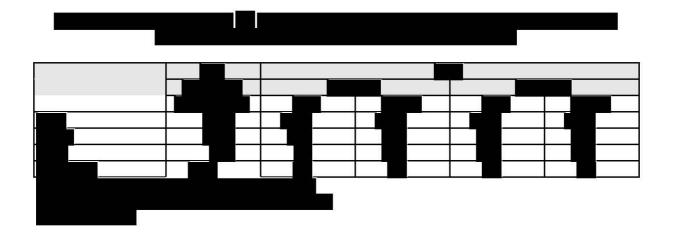
### 5.3 Conclusion

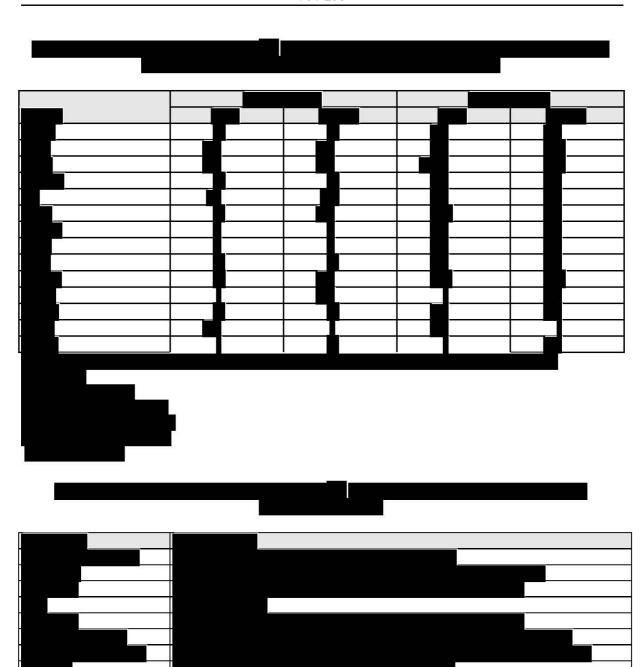
The previous and present studies have shown that there are significant sex-related differences in metabolic reactions of pyriproxyfen (4'-hydroxylation, 5"-hydroxylation, ether cleavage) in the rat, but not in the mouse.

5.3.1 Reliability

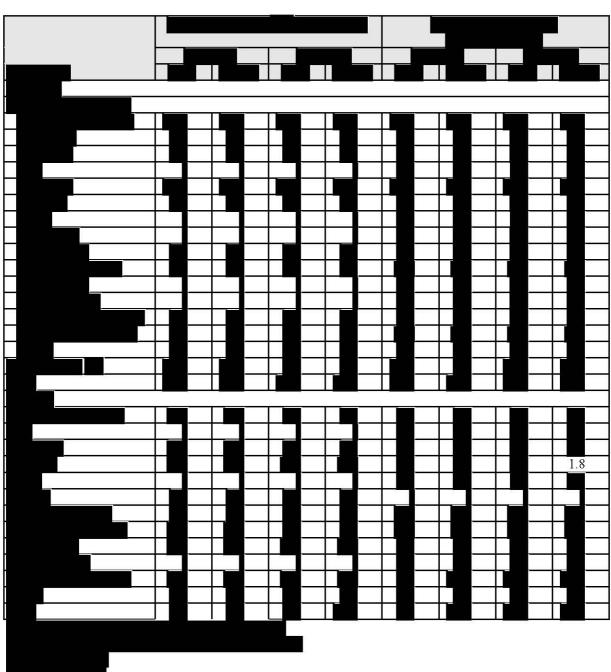
5.3.2 Deficiencies

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







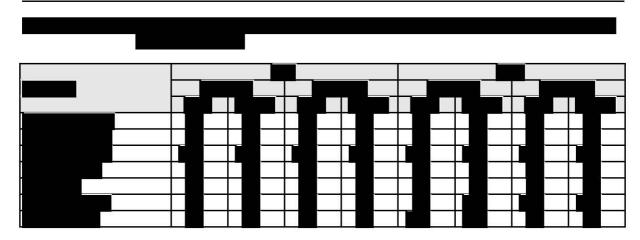


Pyriproxyfen: CAS number 95737-68-1

Doc IIIA

January 2012

RMS: NL



# 6.2.6 Percutaneous absorption

Section 6.2.6	Percutaneous absorption						
Annex Point IIA 6.2							
	Justification for non-submission of data						
	As outlined in the TNsG on data requirements, the applicant must always be able to justify the suggested exemptions from the data requirements. The justifications are to be included in the respective location (section) of the dossier.  If one of the following reasons is marked, detailed justification has to be given below. General arguments are not acceptable						
Other existing data [Yes]	Technically not feasible [ ] Scientifically unjustified [ ]						
Limited exposure [Yes]	Other justification [ ]						
Detailed justification:	There is no exposure to the active substance as pyriproxyfen is not synthesised and the product is not produced within the EU. A study on the active ingredient is therefore not considered necessary and has not been conducted. A dermal absorption study of a formulation is shown in Document IIIB, Section 6.						
Undertaking of intended data submission [ ]	Not applicable						
	<b>Evaluation by Competent Authorities</b>						
	Use separate "evaluation boxes" to provide transparency as to the comments and views submitted						
	Evaluation by Rapporteur Member State						
	T						

82 / 293	Pyriproxyfen: CAS number 95737-6 Doc IIIA	8-1	January 2012 RMS: NL
		82 / 293	
		82 / 293	

Pyriproxyfen: CAS number 95737-68-1

Doc IIIA

January 2012

RMS: NL

83 / 293

## 6.3 Short term repeated dose toxicity (28 days)

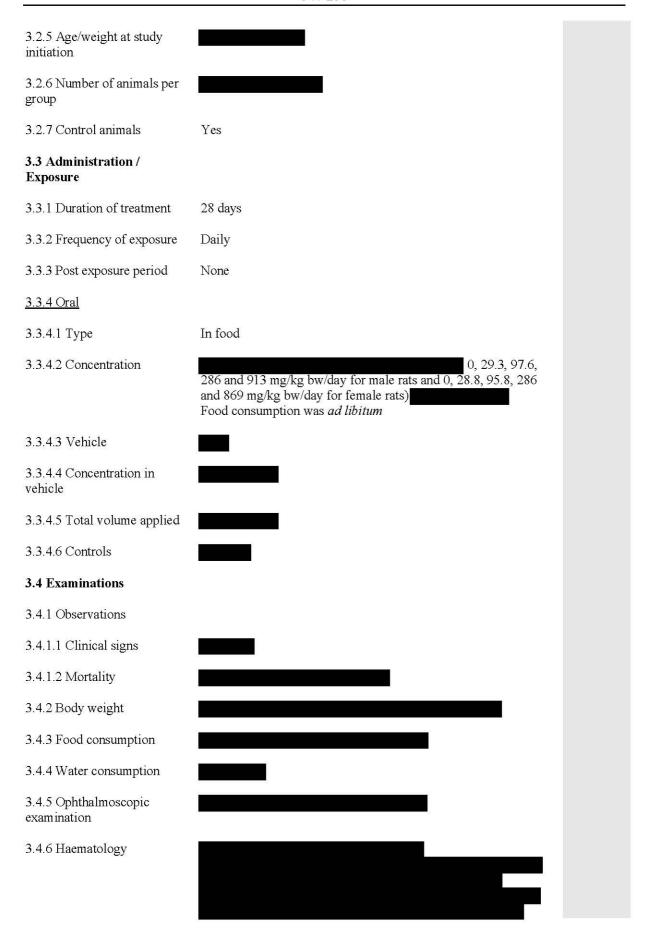
## 6.3.1 Repeated dose toxicity (oral)

**Section A6.3.1/01** 

Repeated dose oral toxicity study in rats

Annex Point ΠA6.3

	1 Reference	Official use only
1.1 Reference		
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 entry into Annex I $$	
	2 GUIDELINES AND QUALITY ASSURANCE	
2.1 Guideline study	No, in house method which was broadly similar to OECD 407	
2.2 GLP		
2.3 Deviations		
	3 MATERIALS AND METHODS	
3.1 Test material		
3.1.1 Lot/Batch No		
3.1.2 Specification		
3.1.2.1 Description		
3.1.2.2 Purity		
3.1.2.3 Stability		
3.2 Test animals		
3.2.1 Species	Rat	
3.2.2 Strain		
3.2.3 Source		
3.2.4 Sex	Male and female	

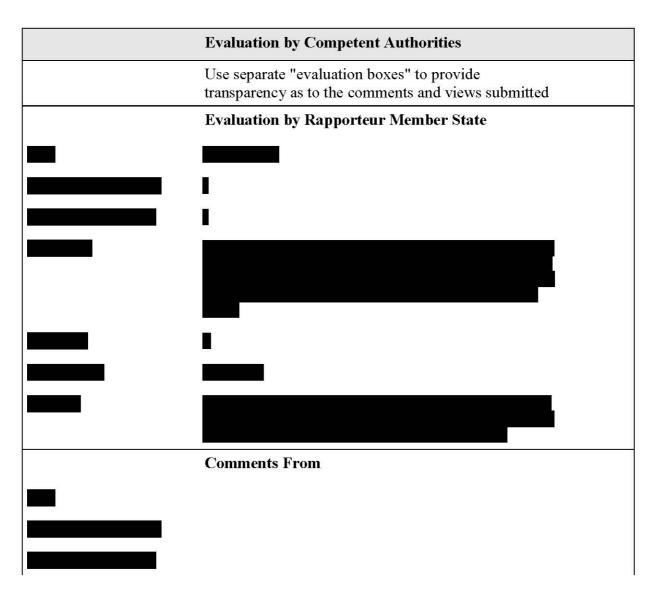




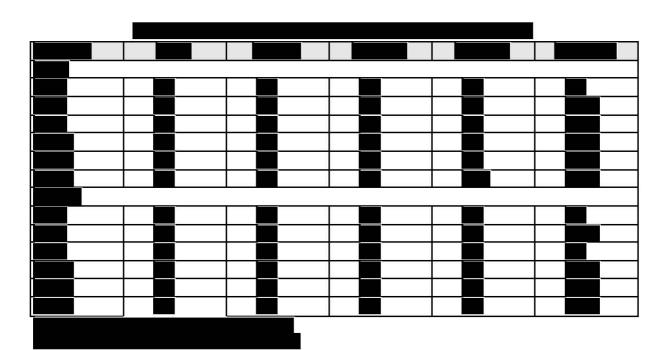




5.3 Conclusion	No-observed-adverse effect-level (NOAEL) was 29.3 mg/kg bw/day for males and 28.8 mg/kg bw/day for females) - based on clinical chemistry changes
5.3.1 LO(A)EL	(97.6 mg/kg bw/day for males and 95.8 mg/kg bw/day for females)
5.3.2 NO(A)EL	(equivalent to 29.3 mg/kg bw/day for males and 28.8 mg/kg bw/day for females)
5.3.3 Other	None
5.3.4 Reliability	1
5.3.5 Deficiencies	







/ 293
1 / 7.

			7
· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	
-		·	

<u>.                               </u>					

He see						
	J	I			I.	1

Pyriproxyfen: CAS number 95737-68-1 January 2012
Doc IIIA RMS: NL

91 / 293

	, Land				2				, <u> </u>	
î.										
				g.						
		200	Si							

#### **Section A6.3.1/02**

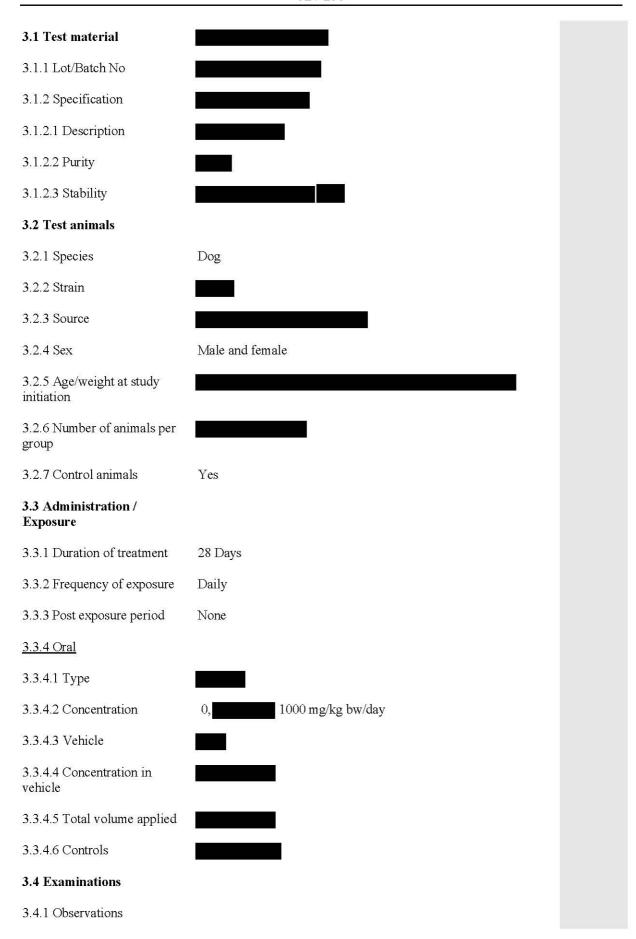
## Repeated dose oral toxicity study in dogs

Annex Point ΠA6.3.1

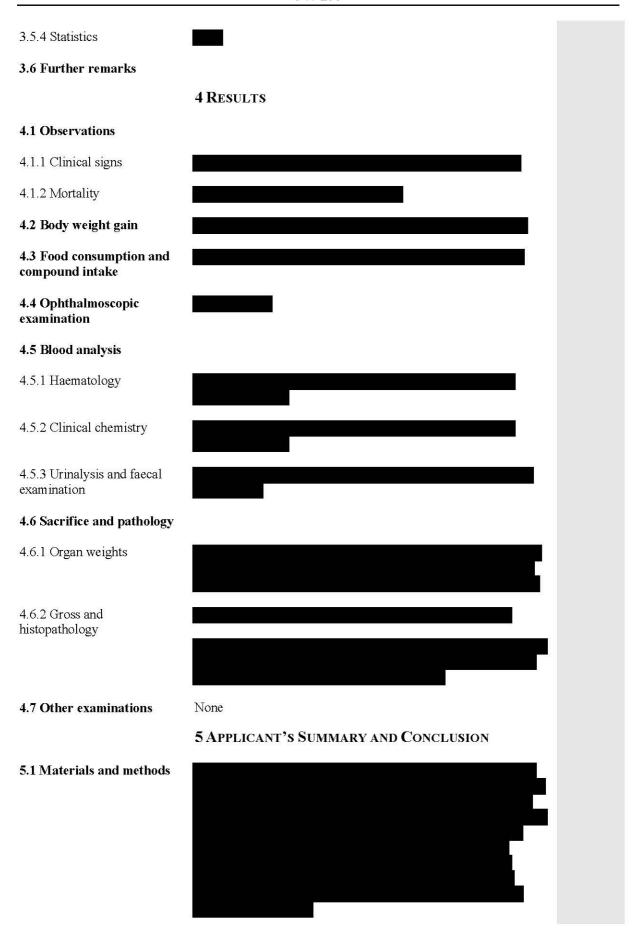
## 1 REFERENCE Official use only 1.1 Reference 1.2 Data protection Yes 1.2.1 Data owner Sumitomo Chemical Co., Ltd. Data submitted to the MS after 13 May 2000 on existing a.s for 1.2.3 Criteria for data the purpose of entry into Annex I protection 2 Guidelines and Quality Assurance 2.1 Guideline study Yes In-house method equivalent to guidelines of toxicity studies of drugs on repeated administration, Notification No.118 of the Pharmaceutical Affairs Bureau, Ministry of Health and Welfare, February 15 1984 2.2 GLP 2.3 Deviations

3 MATERIALS AND METHODS

Pyriproxyfen: CAS number 95737-68-1 January 2012
Doc IIIA RMS: NL







5.2 Results and Discussion

The only treatment related change noted was on the liver.

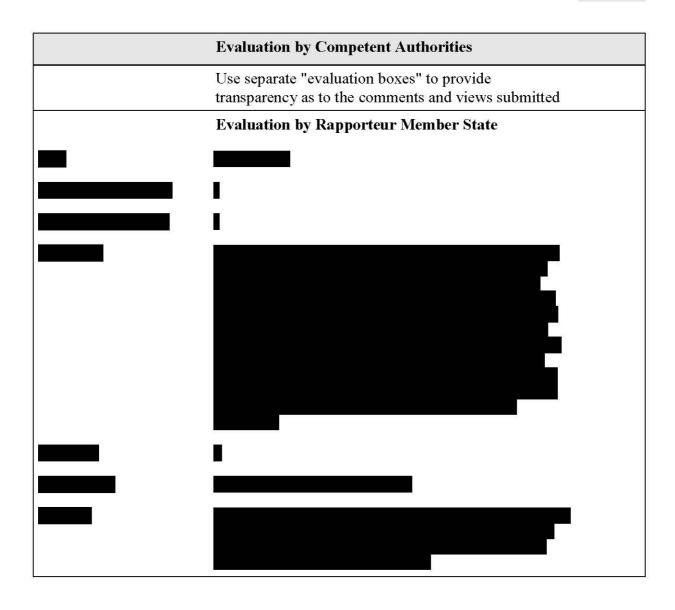
5.3.1 LO(A)EL 1000 mg/kg bw/day

5.3.2 NO(A)EL 300 mg/kg bw/day

5.3.3 Other None

5.3.4 Reliability

5.3.5 Deficiencies



Comments from	

Pyriproxyfen: CAS number 95737-68-1

Doc IIIA

January 2012

RMS: NL

97 / 293

## 6.3.2 Repeated dose toxicity (dermal)

# **Section A6.3.2/01**

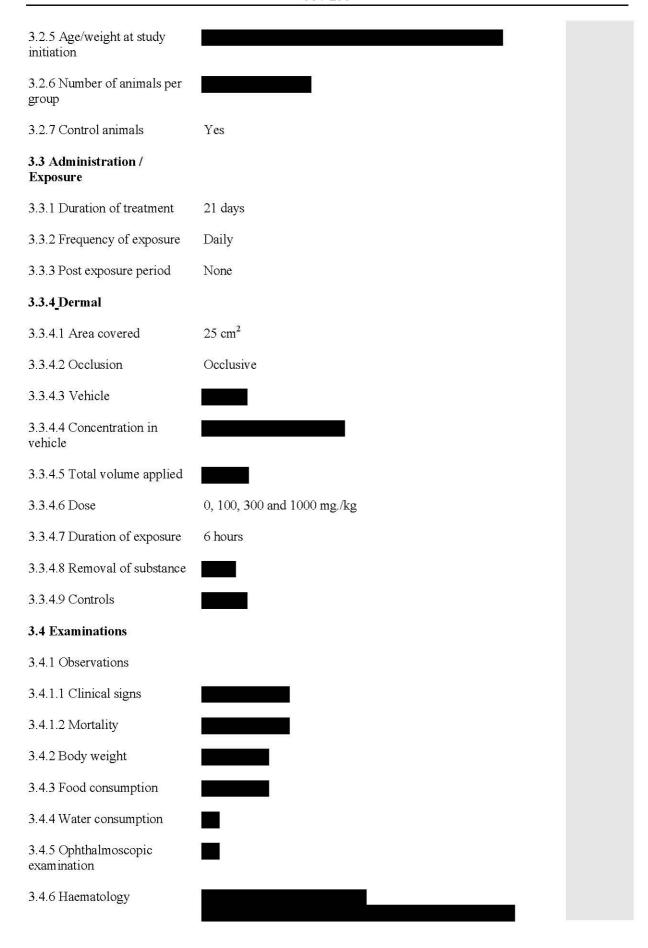
Repeated dose toxicity (dermal)

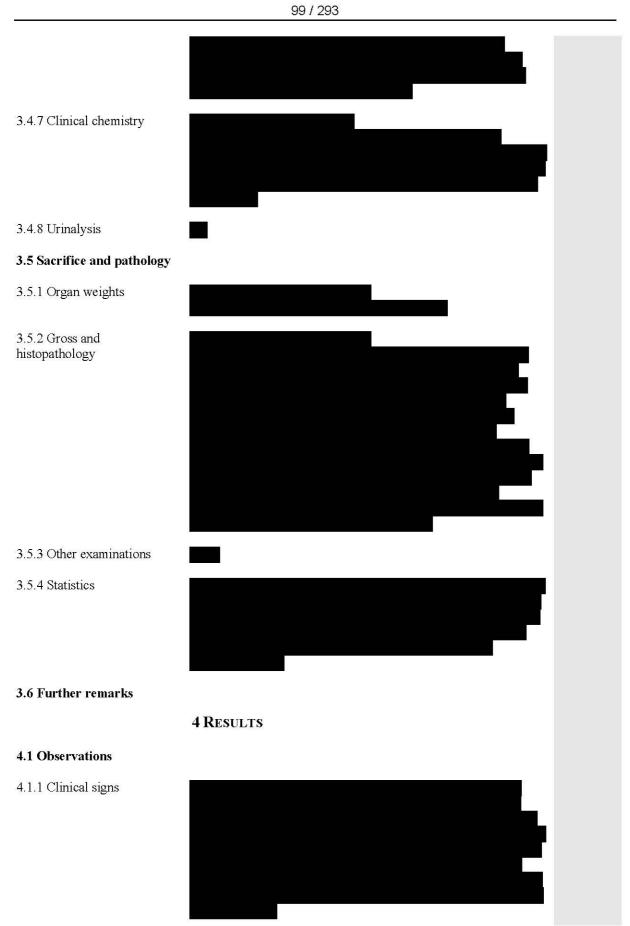
Annex Point IIA 6.3.2

		1 Reference	Official use only
1.1 Re	ference		
1.2 Da	ta protection	Yes	
1.2.1 I	Oata 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 entry into Annex I $$	
		2 Guidelines and Quality Assurance	
2.1 Gu	ideline study	Yes	
		US EPA FIFRA § 82-2, OECD 410	
2.2 GI	.P		
2.3 De	viations		
		3 MATERIALS AND METHODS	
3.1 Te	st material		
3.1.1 L	ot/Batch No		
3.1.2 S	Specification		
3.1.2.1	Description		
3.1.2.2	Purity		
3.1.2.3	Stability		
3.2 Te	st animals		
3.2.1 S	Species	Rat	
3.2.2 S	strain		
3.2.3 S	Source		
3.2.4 S	Sex	Male and female	

Pyriproxyfen: CAS number 95737-68-1 January 2012

Doc IIIA RMS: NL

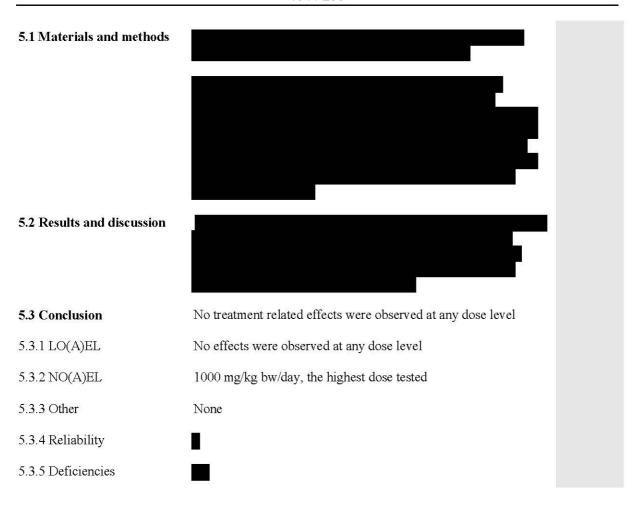




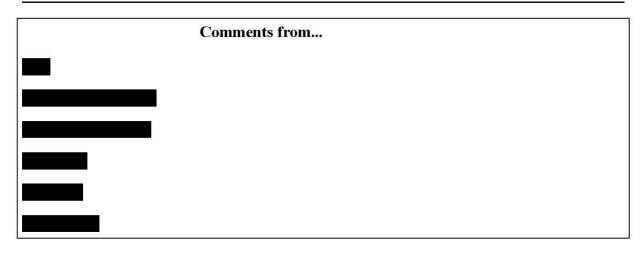
Pyriproxyfen: CAS number 95737-68-1 January 2012
Doc IIIA September 95737-68-1

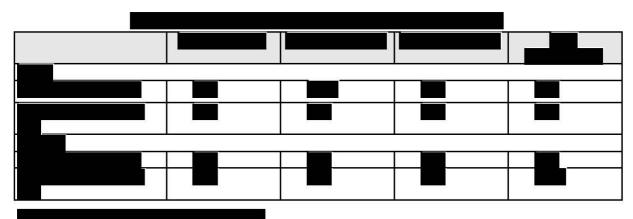


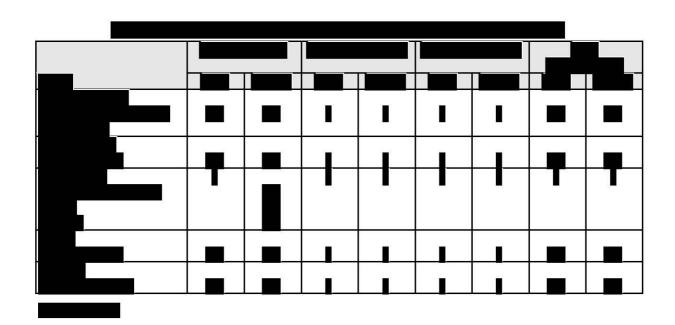
Doc IIIA



<b>Evaluation by Competent Authorities</b>
Use separate "evaluation boxes" to provide transparency as to the comments and views submitted
Evaluation by Rapporteur Member State







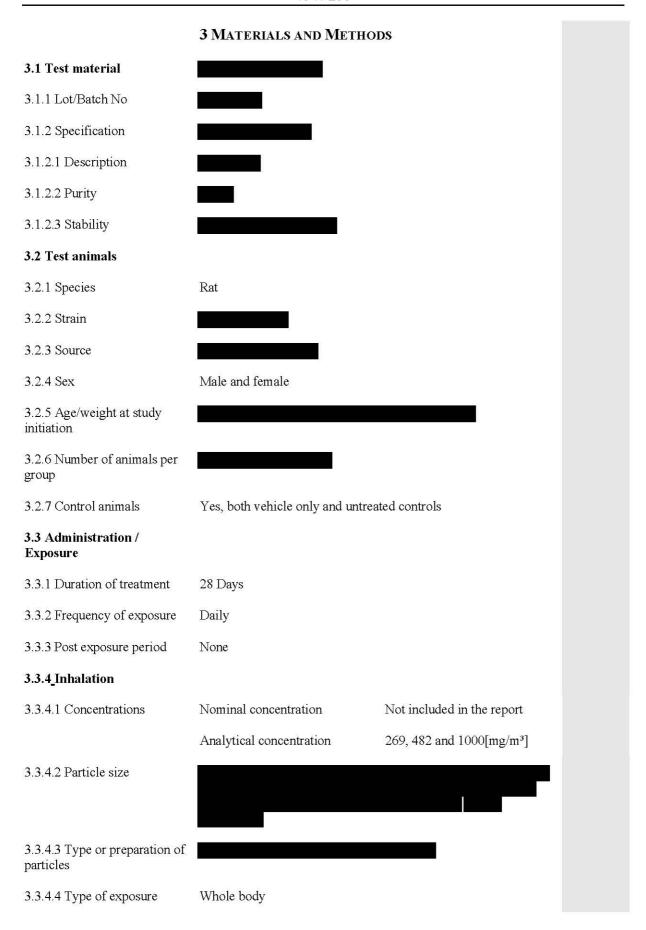
## 6.3.3 Repeated dose toxicity (inhalation)

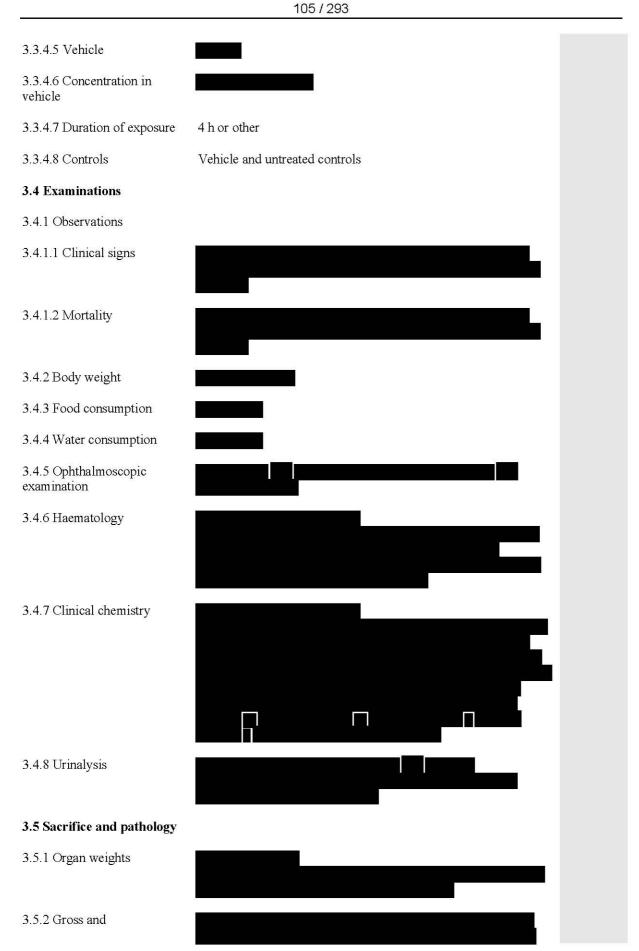
Section A6.3.3/01 Repeated dose toxicity (inhalation)

Annex Point ΠA6.3.3

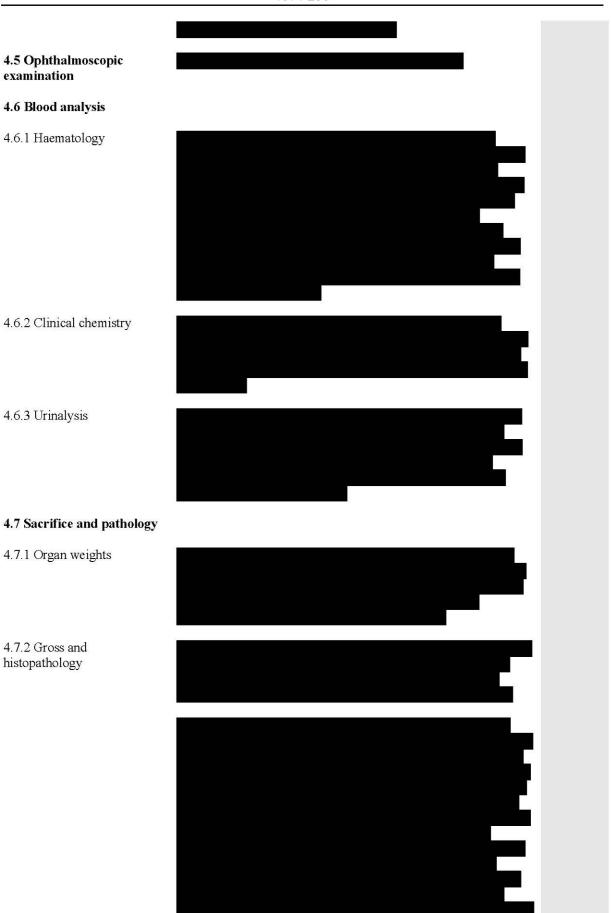
	1 Reference	Official use only
1.1 Reference		
1.2 Data protection	Yes	
1.2.1 Data owner	Sumitomo Chemical Co., Ltd.	
1.2.3 Criteria for data protection	Data submitted to the MS after 13 May 2000 on existing a.s for the purpose of entry into Annex I $$	
	2 GUIDELINES AND QUALITY ASSURANCE	
2.1 Guideline study	Yes	
	In-house method equivalent to OECD 412, EEC B.8	
2.2 GLP		
2.3 Deviations		

Pyriproxyfen: CAS number 95737-68-1 January 2012
Doc IIIA RMS: NL



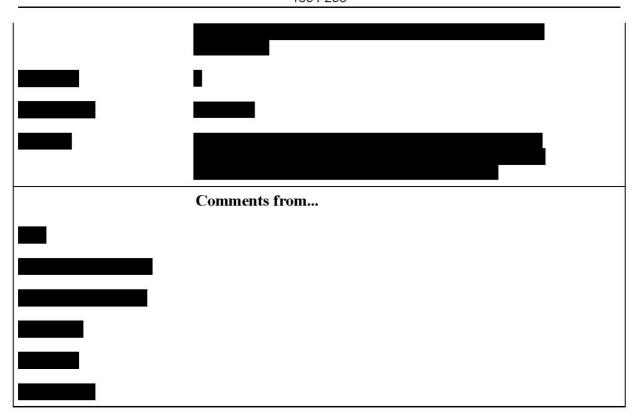




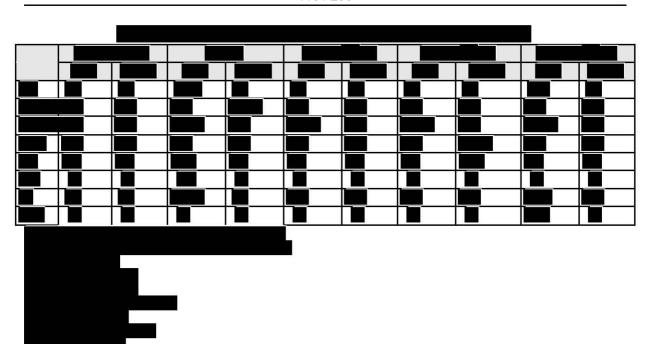


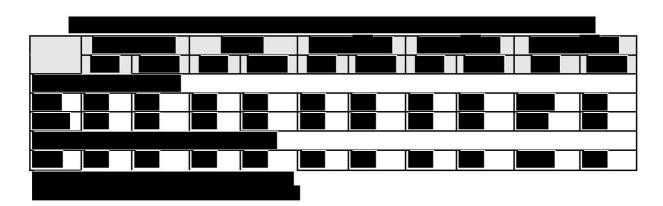


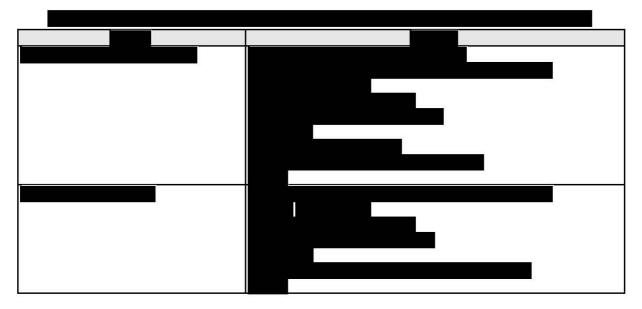
Evaluation by Competent Authorities
Use separate "evaluation boxes" to provide transparency as to the comments and views submitted
Evaluation by Rapporteur Member State
I











	Ī			\$ \$7-				
						E.		
						6		
					2 <b>-</b> 4			
			er-rei					
<u> </u>					_			
				D.				
		_	, <b></b> ;					_
					ş <b></b> .			
	3							

Pyriproxyfen: CAS number 95737-68-1

Doc IIIA

January 2012

RMS: NL

112/293

# 6.4 Subchronic toxicity

## 6.4.1 Subchronic oral toxicity

Section A 6.4.1/01

90 Day toxicity study in rats

Annex Point ΠA 6.4.1

	1 Reference	Official use only
1.1 Reference		case only
1.1 Reference		
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 entry into Annex I	
	2 Guidelines and Quality Assurance	
2.1 Guideline study	Yes	
	US EPA FIFRA $\S$ 82-1, Japanese MAFF 59 Nohsan No.4200, and OECD 408	
2.2 GLP		
2.3 Deviations		
	3 MATERIALS AND METHODS	
3.1 Test material		
3.1.1 Lot/Batch No		
3.1.2 Specification		
3.1.2.1 Description		
3.1.2.2 Purity		
3.1.2.3 Stability		
3.2 Test animals		
3.2.1 Species	Rat	

Pyriproxyfen: CAS number 95737-68-1

Doc IIIA

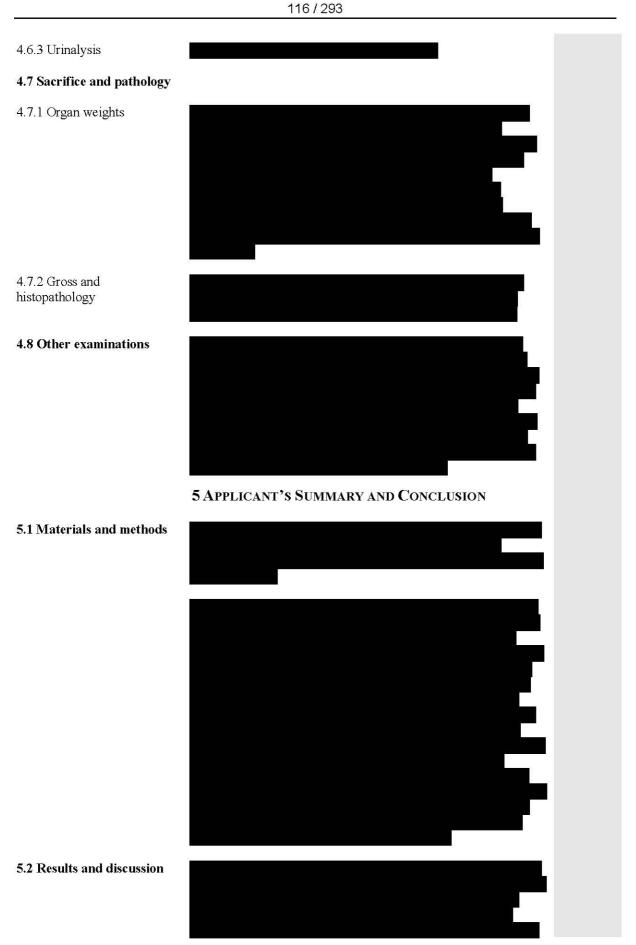
January 2012

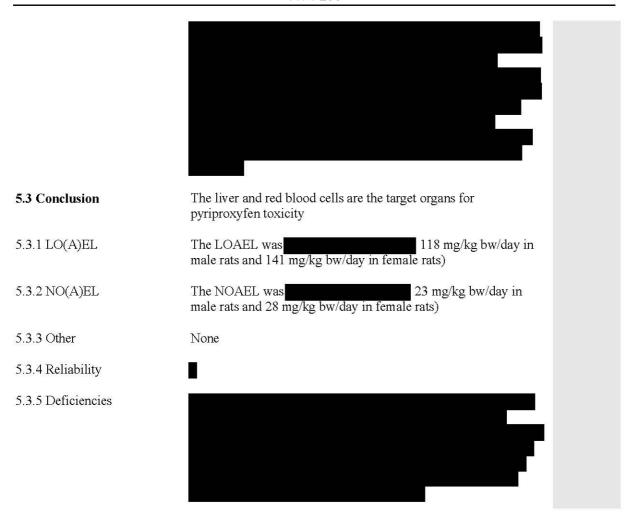
RMS: NL

3.2.2 Strain		
3.2.3 Source		
3.2.4 Sex	Male and female	
3.2.5 Age/weight at study initiation		
3.2.6 Number of animals per group		
3.2.7 Control animals	Yes	
3.3 Administration / Exposure		
3.3.1 Duration of treatment	93 Days	
3.3.2 Frequency of exposure	Daily	
3.3.3 Post exposure period	None	
3.3.4 Oral		
3.3.4.1 Type	In food	
3.3.4.2 Concentration	0, 23, 118, 309 and 642 mg/kg bw/day for male rats and 0, 28, 141, 356 and 784 mg/kg bw/day for female rats. Food consumption per day was ad libitum	
3.3.4.3 Vehicle		
3.3.4.4 Concentration in vehicle		
3.3.4.5 Total volume applied		
3.3.4.6 Controls		
3.4 Examinations		
3.4.1 Observations		
3.4.1.1 Clinical signs		
3.4.1.2 Mortality		
3.4.2 Body weight		
3.4.3 Food consumption		
3.4.4 Water consumption		
3.4.5 Ophthalmoscopic examination		

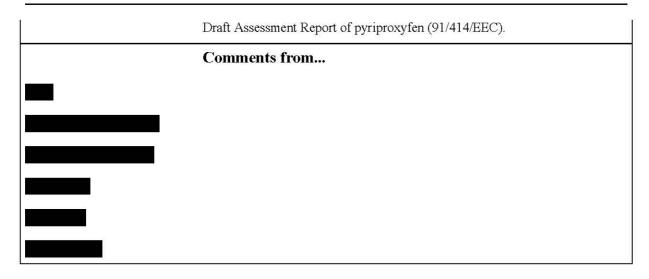


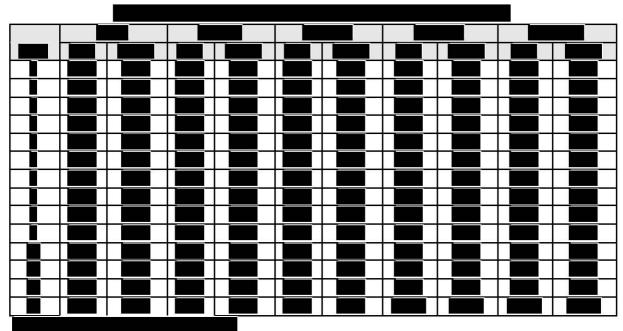






<b>Evaluation by Competent Authorities</b>
Use separate "evaluation boxes" to provide transparency as to the comments and views submitted
Evaluation by Rapporteur Member State
1
I





8-		

 *		2	
_			

	4	-01				
				g.		

	12 12				
			2)		

L	Į.				

Pyriproxyfen: CAS number 95737-68-1 Doc IIIA January 2012 RMS: NL

			ş <b></b>	, <b></b>		<b></b>	

#### Section A 6.4.1/02

# 6 Month toxicity study in rats

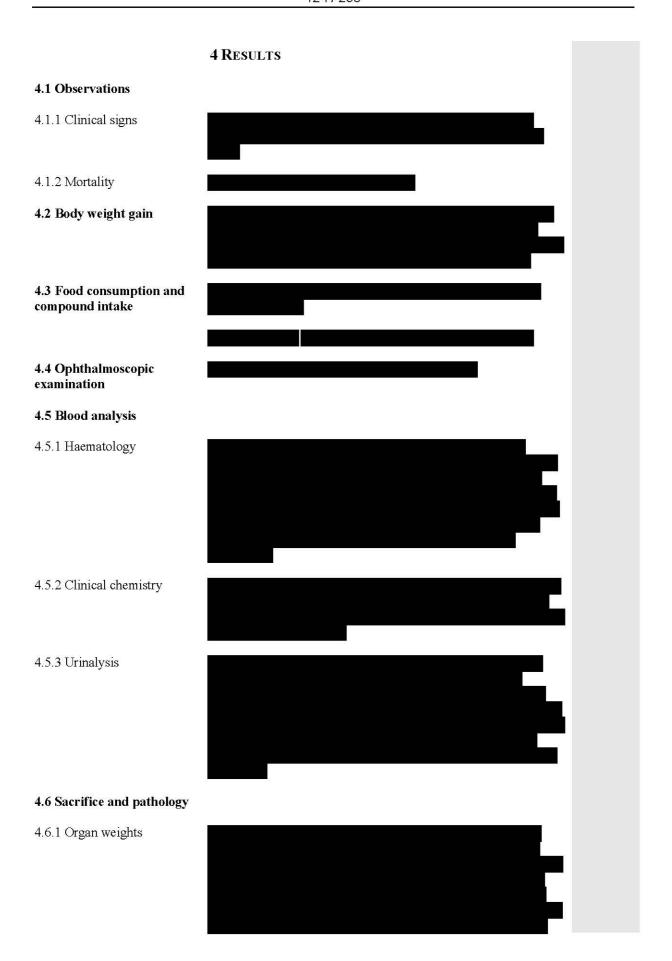
Annex Point ΠΑ 6.4.1

	1 Reference					
1.1 Reference						
1.7	Y					
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 entry into Annex I					
	2 GUIDELINES AND QUALITY ASSURANCE					
2.1 Guideline study	No, but the study generally complied with OECD 452					
2.2 GLP						
2.3 Deviations						
	3 MATERIALS AND METHODS					
3.1 Test material						
3.1.1 Lot/Batch No						
3.1.2 Specification						
3.1.2.1 Description						
3.1.2.2 Purity						
3.1.2.3 Stability						
3.2 Test animals						
3.2.1 Species	Rat					
3.2.2 Strain						
3.2.3 Source						

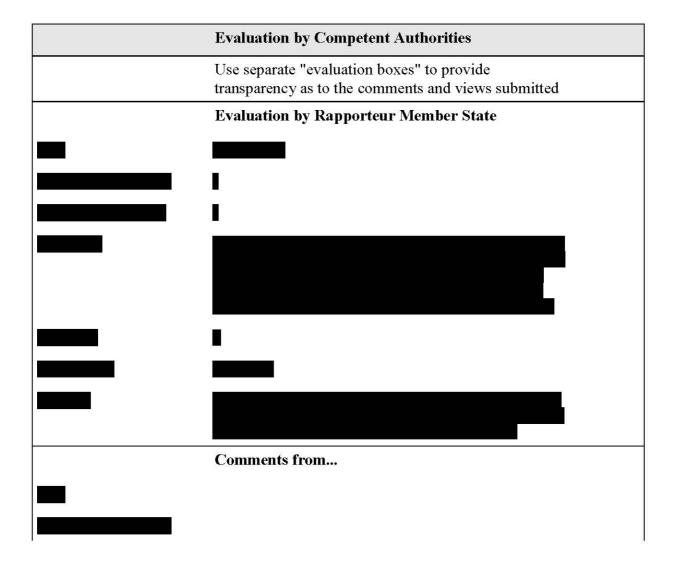
3.2.4 Sex	Male and female	
3.2.5 Age/weight at study initiation		
3.2.6 Number of animals per group		
3.2.7 Control animals	Yes	
3.3 Administration / Exposure		
3.3.1 Duration of treatment	26 Weeks	
3.3.2 Frequency of exposure	Daily	
3.3.3 Post exposure period	None	
3.3.4 <u>Oral</u>		
3.3.4.1 Type	In food	
3.3.4.2 Concentration	0, 4.80, 24.0, 121 and 682 mg/kg bw/day in males and 0, 5.36, 27.5, 136 and 688 mg/kg bw/day Food consumption was <i>ad libitum</i>	
3.3.4.3 Vehicle	_	
3.3.4.4 Concentration in vehicle		
3.3.4.5 Total volume applied		
3.3.4.6 Controls		
3.4 Examinations		
3.4.1 Observations		
3.4.1.1 Clinical signs		
3.4.1.2 Mortality		
3.4.2 Body weight		
3.4.3 Food consumption		
3.4.4 Water consumption		
3.4.5 Ophthalmoscopic		

Pyriproxyfen: CAS number 95737-68-1 January 2012
Doc IIIA RMS: NL

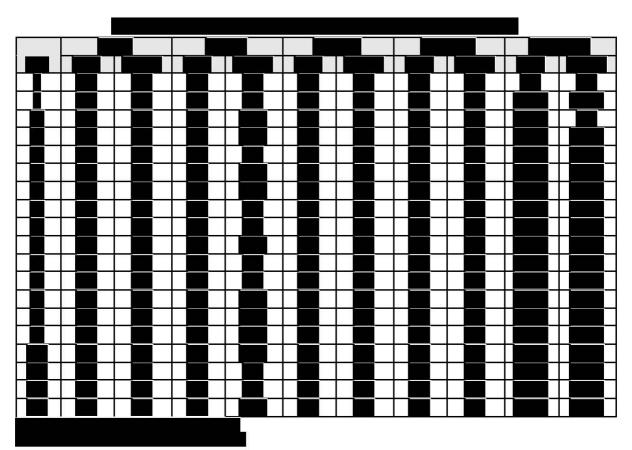


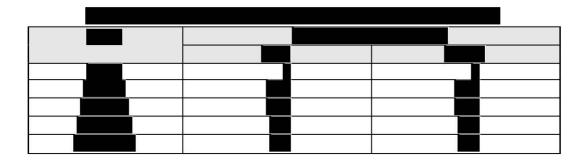


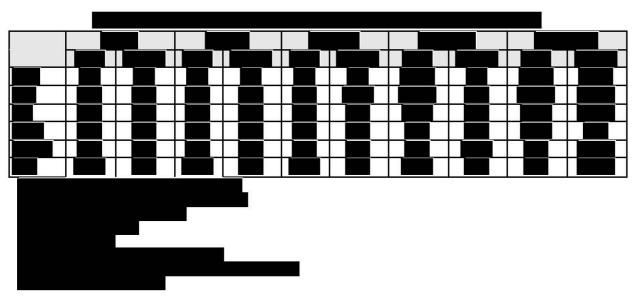
5.3 Conclusion	The No-observed-adverse effect-level was 24.0 mg/kg/day (males) and 27.5 mg/kg/day (female) based on changes in haematology and clinical chemistry in males and females
5.3.1 LO(A)EL	121 mg/kg bw/day for male rats and 136 mg/kg bw/day for female rats
5.3.2 NO(A)EL	24.0 mg/kg bw/day for male rats and 27.5 mg/kg bw/day for female rats
5.3.3 Other	None
5.3.4 Reliability	1
5.3.5 Deficiencies	

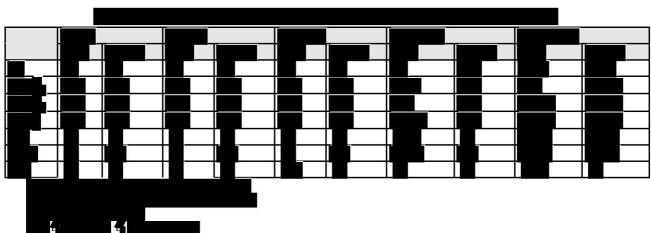












1	29	1	293
			200

			.5		7.	
				100		

							¥	6
a.				 	- 32	70 33 14	12 March 1977	
	-	-	 	 _	+			
			 		-		-	

#### Section A 6.4.1/03

# 90 Day toxicity study in dogs

Annex Point ΠA 6.4.1

	1 Reference	Official use only
1.1 Reference		
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 entry into Annex I	
	2 Guidelines and Quality Assurance	
2.1 Guideline study	Yes	
	In-house method equivalent to guidelines of toxicity studies of drugs on repeated administration, Directive 88/302/EEC Part B, Sub-chronic oral toxicity test: 90-day repeated oral dose study using non-rodent species and OECD 409	
2.2 GLP		
2.3 Deviations		
	3 MATERIALS AND METHODS	
3.1 Test material		
3.1.1 Lot/Batch No		
3.1.2 Specification		
3.1.2.1 Description		
3.1.2.2 Purity		
3.1.2.3 Stability		
3.2 Test animals		
3.2.1 Species	Dog	
3.2.2 Strain		
3.2.3 Source		

3.2.4 Sex	Male and female	
3.2.5 Age/weight at study initiation		
3.2.6 Number of animals per group		
3.2.7 Control animals	Yes	
3.3 Administration / Exposure		
3.3.1 Duration of treatment	91 days	
3.3.2 Frequency of exposure	Daily	
3.3.3 Post exposure period	None	
3.3.4 <u>Oral</u>		
3.3.4.1 Type		
3.3.4.2 Concentration	0, 100, 300 and 1000mg/kg bw/day	
3.3.4.3 Vehicle		
3.3.4.4 Concentration in vehicle		
3.3.4.5 Total volume applied		
3.3.4.6 Controls		
3.4 Examinations		
3.4.1 Observations		
3.4.1.1 Clinical signs		
3.4.1.2 Mortality		
3.4.2 Body weight		
3.4.3 Food consumption		
3.4.4 Water consumption		
3.4.5 Ophthalmoscopic examination		
3.4.6 Haematology		





5.1 Materials and methods