Table A6.8.2-1: Summary of absolute and relative organ weights (males)

Organ	Dose level			
	Control	125 mg/kg bw/day	250 mg/kg bw/day	500 mg/kg bw/day
P males				
Absolute spleen (g)	1.109 ± 0.192	1.174 ± 0.237	1.128 ± 0.184	1.005 ± 0.307
Relative spleen (%)	0.247 ± 0.098	0.282 ± 0.066	0.263 ± 0.041	0.250 ± 0.076
Absolute thymus (g)	-	-	-	-
Relative thymus (%)	-	-	-	-
F_1 males (pup rats)				
Absolute spleen (g)	0.157 ± 0.063	0.202 ± 0.231	0.152 ± 0.053	0.155 ± 0.080
Relative spleen (%)	0.495 ± 0.153	0.679 ± 0.719	0.457 ± 0.140	0.453 ± 0.168
Absolute thymus (g)	0.150 ± 0.072	0.200 ± 0.243	0.149 ± 0.069	0.140 ± 0.073
Relative thymus (%)	0.486 ± 0.252	0.663 ± 0.764	0.444 ± 0.171	0.422 ± 0.206
F_1 males (parent rats)				
Absolute spleen (g)	0.925 ± 0.053	0.731[a] ± 0.036	0.707[a] ± 0.030	0.684[a] ± 0.095
Relative spleen (%)	0.245 ± 0.067	0.193[a] ± 0.010	0.178[a] ± 0.034	0.177[a] ± 0.029
Absolute thymus (g)	-	-	-	-
Relative thymus (%)	-	-	-	-
F_2 males (pup rats)				
Absolute spleen (g)	0.299 ± 0.017	0.261 ± 0.010	0.307 ± 0.020	0.278 ± 0.015
Relative spleen (%)	0.796 ± 0.039	0.720 ± 0.040	0.732 ± 0.044	0.639[a] ± 0.030
Absolute thymus (g)	0.280 ± 0.013	0.274 ± 0.011	0.281 ± 0.009	0.264 ± 0.011
Relative thymus (%)	0.757 ± 0.046	0.763 ± 0.058	0.682 ± 0.028	0.614[a] ± 0.027

[a] Significantly different from control at 5% probability level by Student t´test

Table A6.8.2-2: Summary of absolute and relative organ weights (females)

Organ	Dose level			
	Control	125 mg/kg bw/day	250 mg/kg bw/day	500 mg/kg bw/day
P females				
Absolute spleen (g)	0.775 ± 0.242	0.590[a] ± 0.172	0.640[a] ± 0.150	0.741 ± 0.190
Relative spleen (%)	0.284 ± 0.092	0.221[a] ± 0.061	0.229[a] ± 0.057	0.303 ± 0.202
Absolute thymus (g)	0.169 ± 0.030	0.158 ± 0.036	0.152 ± 0.039	0.154 ± 0.028
Relative thymus (%)	0.062 ± 0.013	0.060 ± 0.015	0.054 ± 0.015	0.059 ± 0.016
F_1 females (pup rats)				
Absolute spleen (g)	0.202 ± 0.227	0.166 ± 0.058	0.148 ± 0.048	0.138 ± 0.053
Relative spleen (%)	0.676 ± 0.866	0.549 ± 0.164	0.458 ± 0.128	0.431 ± 0.123
Absolute thymus (g)	0.143 ± 0.058	0.154 ± 0.073	0.151 ± 0.068	0.130 ± 0.062
Relative thymus (%)	0.476 ± 0.223	0.503 ± 0.233	0.458 ± 0.177	0.424 ± 0.198
F_1 females (parent rats)				
Absolute spleen (g)	0.670 ± 0.190	0.584 ± 0.136	0.658 ± 0.113	0.613 ± 0.105
Relative spleen (%)	0.260 ± 0.077	0.216[a] ± 0.051	0.229 ± 0.043	0.303[a] ± 0.202
Absolute thymus (g)	0.203 ± 0.053	0.193 ± 0.036	0.199 ± 0.029	0.194 ± 0.030
Relative thymus (%)	0.079 ± 0.022	0.072 ± 0.016	0.069 ± 0.014	0.059 ± 0.016
F_2 females (pup rats)				
Absolute spleen (g)	0.303 ± 0.020	0.249[a] ± 0.009	0.280 ± 0.012	0.271 ± 0.015
Relative spleen (%)	0.784 ± 0.044	0.700 ± 0.042	0.683 ± 0.023	0.619[a] ± 0.029
Absolute thymus (g)	0.299 ± 0.012	0.269 ± 0.013	0.283 ± 0.013	0.273 ± 0.009
Relative thymus (%)	0.782 ± 0.036	0.736 ± 0.032	0.701 ± 0.039	0.630[a] ± 0.023

[a] Significantly different from control at 5% probability level by Student t´test

Section A6.9 Annex Point IIIA 6.9	Neurotoxicity study	
	JUSTIFICATION FOR NON-SUBMISSION OF DATA	Official use only
Other existing data [X] **Limited exposure [ ]**	**Technically not feasible [ ] Scientifically unjustified [ ]** **Other justification [ ]**	
Detailed justification:	**It is proposed that a study to investigate the neurotoxic potential of exposure to Permethrin is not required, as there is sufficient data available in the open literature and the mechanism of action is well documented.** The neurotoxicity of Permethrin has been studied in rats and hens, under acute and sub-chronic exposures. Rats were administered Permethrin (cis:trans ratio: 36%: 59%, purity 95.3%) at doses of 0, 10, 150 and 300 mg/kg bw. Clinical signs in the high dose group included tremors, staggered gait, splayed hind limbs, exaggerated hind-limb flexion and hypersensitivity to sound. Neuropathological examination of nervous tissue revealed no treatment-related lesions. The NOAEL was considered to be 150 mg/kg bw (JMPR, 1999). In a separate study, Permethrin (cis:trans ratio: 36%: 59%; purity: 95.3%) was administered in the diet to rats for 28 days, at concentrations of 0, 100, 750, 1500, 3000, 4000 or 5000 ppm. Treatment related clinical signs; similar to those observed in the previous study, were seen at doses ≥ 1500 ppm. The NOAEL was considered to be 750 ppm (38 mg/kg bw/day), based on neurotoxic effects at higher dose groups (JMPR, 1999). Two 90-day studies, investigating the neurotoxic effects of Permethrin to rats have been reported. Rats were administered Permethrin (cis:trans ratio, 36%:59%; purity, 95.3%) at concentrations of 0, 250, 1500 and 2500 ppm in the diet. Clinical signs included staggered gait, splayed hind limbs and tremors, which generally increased in both frequency and severity with dose. No treatment related lesions were observed during neuropathological examination. The NOAEL was 250 ppm (15 mg/kg/day). In the second study, the reversibility of effects was investigated in a group of high dose rats (340 mg/kg bw/day), which were maintained for a further 6 weeks at the end of dosing. Clinical signs disappeared within 24 hours post dosing in females. In males, tremors and twitching ceased within 1 day and hyperexcitability within 2-3 days. The lowest NOAEL was 86 mg/kg bw/day, based on neurotoxic clinical signs and significant changes in function at higher doses (JMPR, 1999). Permethrin (cis: trans ratio: 50:50 purity: 96%) was administered to laying hens at 1000 mg/kg bw/day for 5 days. The hens were re-dosed after 21 days and observed for an additional 21 days. No neurological disturbances and no histological lesions were found in the peripheral or central nervous system (JMPR, 1999). Please be aware that Permethrin (25:75 cis:trans ratio) being supported in this submission is known to be less toxic than 39:59 or 50:50 ratios, thus any neurotoxic effects should be less severe. **It is proposed that the neurotoxicological effects of Permethrin has**	

Section A6.9 Annex Point IIIA 6.9	Neurotoxicity study
	been adequately investigated in the above studies and that it would be scientifically unjustified to conduct further *in vivo* studies in this area. In conclusion, there are no ethical grounds (that would not contravene the requirements of Directive 86/609/EC which advises against unnecessary testing using animals) for performing further studies on animals. It is therefore proposed that no additional investigations are required to address this point.
Undertaking of intended data submission [ ]	Not relevant
	Evaluation by Competent Authorities
	Use separate "evaluation boxes" to provide transparency as to the comments and views submitted
	EVALUATION BY RAPPORTEUR MEMBER STATE
Date	*Give date of action*
Evaluation of applicant's justification	*Discuss applicant's justification and, if applicable, deviating view*
Conclusion	*Indicate whether applicant's justification is acceptable or not. If unacceptable because of the reasons discussed above, indicate which action will be required, e.g. submission of specific test/study data*
Remarks	
	COMMENTS FROM OTHER MEMBER STATE *(specify)*
Date	*Give date of comments submitted*
Evaluation of applicant's justification	*Discuss if deviating from view of rapporteur member state*
Conclusion	*Discuss if deviating from view of rapporteur member state*
Remarks	

Section A6.10 Annex Point IIIA 6.10	Mechanistic study	
	JUSTIFICATION FOR NON-SUBMISSION OF DATA	Official use only
Other existing data [X] **Limited exposure [ ]**	**Technically not feasible [ ]** **Scientifically unjustified [ ]** **Other justification [ ]**	
Detailed justification:	It is proposed that sufficient information is provided to explain the effects of Permethrin on mammals and to address the metabolism of Permethrin in mammals. Please refer to Doc IIIA, 6.2. Furthermore, there are no ethical grounds (that would not contravene the requirements of Directive 86/609/EC which advises against unnecessary testing using animals) for performing further studies on animals. It is therefore proposed that no additional investigations are required to address this point.	
Undertaking of intended data submission [ ]	Not applicable	
	Evaluation by Competent Authorities	
	Use separate "evaluation boxes" to provide transparency as to the comments and views submitted	
	EVALUATION BY RAPPORTEUR MEMBER STATE	
Date	*3rd July 2009*	
Evaluation of applicant's justification	The mechanism of action of pyrethroid insecticides including permethrin has been extensively studied in several species In addition, the mechanisms of toxicity and the metabolic fate of permethrin have been summarised by several international organisations (for example Environmental Health Criteria 94: Permethrin. IPCS. World Health Organisation). Further mechanistic study is not warranted.	
Conclusion	The justification for non-submission is acceptable.	
Remarks		
	COMMENTS FROM OTHER MEMBER STATE *(specify)*	
Date	*Give date of comments submitted*	
Evaluation of applicant's justification	*Discuss if deviating from view of rapporteur member state*	
Conclusion	*Discuss if deviating from view of rapporteur member state*	
Remarks		

Section A6.11 Annex Point IIA 6.11	**Studies on other routes of administration (parenteral routes)**	
	JUSTIFICATION FOR NON-SUBMISSION OF DATA	Official use only
Other existing data [ ] **Limited exposure [ ]**	**Technically not feasible [ ]** **Scientifically unjustified [X]** **Other justification [ ]**	
Detailed justification:	For existing active substances, these studies on alternative routes only need to be submitted if the data already exists. New studies are normally only required in exceptional circumstances. The most relevant routes of exposure (oral, dermal and inhalation route) in the case of Permethrin have been investigated and are presented as part of this submission. In addition, there are no ethical grounds (that would not contravene the requirements of Directive 86/609/EC which advises against unnecessary testing using animals) for performing further studies on animals. It is therefore proposed that no additional investigations are required to address this point.	
Undertaking of intended data submission [ ]	Not applicable	
	Evaluation by Competent Authorities	
	Use separate "evaluation boxes" to provide transparency as to the comments and views submitted	
	EVALUATION BY RAPPORTEUR MEMBER STATE	
Date	*3rd July 2009*	
Evaluation of applicant's justification	Studies regarding oral, dermal and inhalation exposure have been provided and as these routes represent the most relevant routes of exposure more study is not required.	
Conclusion	The applicants justification is acceptable.	
Remarks		
	COMMENTS FROM OTHER MEMBER STATE *(specify)*	
Date	*Give date of comments submitted*	
Evaluation of applicant's justification	*Discuss if deviating from view of rapporteur member state*	
Conclusion	*Discuss if deviating from view of rapporteur member state*	
Remarks		

Section 6.12.1 Annex Point IIA6.12.1	Medical Surveillance Data on Manufacturing Plant Personnel if Available	
	JUSTIFICATION FOR NON-SUBMISSION OF DATA	Official use only
Other existing data [X] **Limited exposure [ ]**	**Technically not feasible [ ]** **Scientifically unjustified [ ]** **Other justification [ ]**	
Detailed justification:	Toxicological evaluations on Permethrin have previously been carried out by the World Health Organisation (1990) and the JMPR (1999). For both evaluations observational data in humans was submitted. In WHO trials in Nigeria, no adverse effects were observed following indoor use of Permethrin at a rate of 0.5g/m^3. In a seperate study summarised in the JMPR toxicological evaluation (1999) 23 laboratory workers involved in field trials, formulation or general laboratory work with synthetic pyrethroids (Cypermethrin, Permethrin, Fenvalerate and Fenpropathrin) were examined. The study was based on interviews, examination and electrophysiological monitoring. No symptoms were noted following exposure to Permethrin. Exposure to Cypermethrin, Fenvalerate and Fenpropathrin resulted in symptoms such as facial tingling and burning. 19 of the subjects had displayed one or more episodes of abnormal facial sensation 0.5 to 3 hours after exposure which persisted for 0.5 to 8 hours. 13 subjects had experienced more than one episode. However, these symptoms were not observed when only Permethrin was used. All the workers were examined neurologically and no abnormal findings were recorded. Electro-physiological measurements from these workers were compared with those of an age-matched control group. No difference in response was found between the two groups.	
Undertaking of intended data submission [ ]	Not applicable	
	Evaluation by Competent Authorities	
	Use separate "evaluation boxes" to provide transparency as to the comments and views submitted	
	EVALUATION BY RAPPORTEUR MEMBER STATE	
Date	*3rd of July 2009*	
Evaluation of applicant's justification	This summary report is not based on manufacturing plant worker data. It appears that data is not available.	
Conclusion	Justification is acceptable based on apparent lack of data rather than the submitted summary report.	
Remarks		
	COMMENTS FROM OTHER MEMBER STATE *(specify)*	
Date	*Give date of comments submitted*	

Section A6.11 Annex Point IIA 6.11	Studies on other routes of administration (parenteral routes)
Evaluation of applicant's justification	*Discuss if deviating from view of rapporteur member state*
Conclusion	*Discuss if deviating from view of rapporteur member state*
Remarks	

Section A6.12.2 Annex Point IIA6.12.1	Direct Observation, e.g. Clinical Cases, Poisoning Incidents if Available	
	JUSTIFICATION FOR NON-SUBMISSION OF DATA	Official use only
Other existing data [X] **Limited exposure [ ]**	**Technically not feasible [ ]** **Scientifically unjustified [ ]** **Other justification [ ]**	
Detailed justification:	Toxicological evaluations on Permethrin have previously been carried out by the World Health Organisation (1990) and the JMPR (1999). For both evaluations observational data in humans was submitted. As reported by WHO, 0.05 ml of field-strength –formulated Permethrin (0.13mg/cm^2), (cis:trans ratio not documented) was applied to a 4 cm^2 area of earlobe. The opposite earlobe received distilled water. Participant evaluation continued for 48 hours after application. Paresthesia developed with a latency period of approximately 30 minutes, peaked by 8 hours, and deteriorated within 24 hours. In the case of Permethrin these sensations were approximately four times less marked than those induced by Cypermethrin and Fenvalerate which were also tested at that time. In another study presented in WHO and JMPR, a group of 10 male volunteer soldiers wore military clothing for 48 hours that were impregnated with an aqueous solution of 0.2% w/v Permethrin (25:75). The mean concentration of Permethrin in the shirts and trousers was 0.32g/100g. The average individual exposure to Permethrin was 3.8 mg/day. No volunteers complained of irritation and there were no abnormal findings on physical examination. WHO also reports a case whereby 10 volunteers were treated with 15-40 ml of 1% Permethrin (25:75) head louse solution. Urinalysis and clinical obseravtions were carried out. Three out of 10 volunteers developed mild, patchy erythema, which faded between days 4 and 7. Permethrin excretion during the first 24 hours was only about 1% of the applied dose, while the cumulative maximum over 14 days was only about 5.5 mg. In JMPR, a case is reported whereby a group of 435 patients, most of them children, were treated for pediculosis capitis: approximately half of the group were treated with a single, 10-min application of 25-50 ml of a cream rinse containing Permethrin (1%) and isopropanol (20%) after towel drying of washed hair, and the remaining patients were treated with a liquid product containing Pyrethrins (0.3%). Cutaneous side-effects such as pruritus, mild transient skin burning and stinging sensations were reported by 7% of the patients treated with 1% Permethrin and by 16% of those treated with Pyrethrins (0.3%). The irritation due to Pyrethrins was noted in twice as many patients as Permethrin. According to Annex I of Council Directive 67/548/EEC isopropanol is classified as irritant to the skin and is assigned the symbol Xi and the R-phrase R36. Hence it is difficult to attribute the cutaneous effects solely to Permethrin. These effects may be induced by the presence of isopropanol at 20%. Furthermore the acute studies presented as part of this dossier indicate that Permethrin is not harmful by skin	

Section A6.12.2 Annex Point IIA6.12.1	Direct Observation, e.g. Clinical Cases, Poisoning Incidents if Available
	contact or a dermal irritant in mammals. Please refer to Doc IIIA, 6.1.2 and IIIA, 6.1.4/1. The JMPR evaluation also reports an observational study undertaken in the USA to evaluate the safety of a cream rinse containing 1% Permethrin for treatment of head louse infestations. The survey enrolled 38160 patients for 47578 treatments with Permethrin and other pediculicides between 1986 and 1988. The rates of reported adverse events were 2.2 per 1000 treatments with Permethrin, 3.4 per 1000 treatments with Lindane and 1.5 per 1000 treatments with other over-the-counter preparations. No serious, unexpected adverse event was detected in the 18950 patients treated with Permethrin. Therefore it can be concluded that Permethrin does not cause any adverse effects even when it is directly applied to the skin of humans. This submission relates to the use of Permethrin as a wood preservative applied directly to the wood surface by pressure impregnation, dipping, spraying or painting and is not intended for direct application to skin. However, this data does provide relevant information on the irritating effects of Permethrin, should it come in contact with human skin.
Undertaking of intended data submission [ ]	Not applicable
	Evaluation by Competent Authorities
	Use separate "evaluation boxes" to provide transparency as to the comments and views submitted
	EVALUATION BY RAPPORTEUR MEMBER STATE
Date	*3rd July 2009*
Evaluation of applicant's justification	*Permethrin is widely used an active ingredient in pharmaceutical preparations for the treatment of head lice. Inclusion of clinical data related to this function appears appropriate.*
Conclusion	*Justification is acceptable.*
Remarks	
	COMMENTS FROM OTHER MEMBER STATE *(specify)*
Date	*Give date of comments submitted*
Evaluation of applicant's justification	*Discuss if deviating from view of rapporteur member state*
Conclusion	*Discuss if deviating from view of rapporteur member state*
Remarks	

Section A6.12.3 Annex Point IIAV1.6.9.1	**Health records, both from industry and any other available sources**	
	JUSTIFICATION FOR NON-SUBMISSION OF DATA	Official use only
Other existing data [ ] **Limited exposure [ ]**	**Technically not feasible [ ]** **Scientifically unjustified [ ]** **Other justification [X]**	
Detailed justification:	A signed declaration from Tagros Chemicals India Limited is available which indicates that no adverse effects or incidents have been recorded at their manufacturing plant (Premnadh, 2006). The actual medical records can be provided upon request.	
Undertaking of intended data submission [ ]	Not applicable	
	Evaluation by Competent Authorities	
	Use separate "evaluation boxes" to provide transparency as to the comments and views submitted	
	EVALUATION BY RAPPORTEUR MEMBER STATE	
Date	*3rd of July 2009*	
Evaluation of applicant's justification	*A statement has been made regarding effects.*	
Conclusion	*Justification is acceptable.*	
Remarks		
	COMMENTS FROM OTHER MEMBER STATE *(specify)*	
Date	*Give date of comments submitted*	
Evaluation of applicant's justification	*Discuss if deviating from view of rapporteur member state*	
Conclusion	*Discuss if deviating from view of rapporteur member state*	
Remarks		

Section A6.12.4 Annex Point IIA 6.12.4	Epidemiological studies on the general population	
	JUSTIFICATION FOR NON-SUBMISSION OF DATA	Official use only
Other existing data [ ] **Limited exposure [ ]**	**Technically not feasible [ ]** **Scientifically unjustified [ ]** **Other justification [X]**	
Detailed justification:	To our knowledge, no epidemiological studies are available for Permethrin.	
Undertaking of intended data submission [ ]	Not applicable	
	Evaluation by Competent Authorities	
	Use separate "evaluation boxes" to provide transparency as to the comments and views submitted	
	EVALUATION BY RAPPORTEUR MEMBER STATE	
Date	3rd July 2009	
Evaluation of applicant's justification	It appears unlikely the no epidemiological information is available for permethrin. This substance has been used as a pharmaceutical active ingredient for many years. Perhaps the notifier limited its search to pesticide and biocide applications.	
Conclusion	Accept applicant's justification.	
Remarks		
	COMMENTS FROM OTHER MEMBER STATE *(specify)*	
Date	*Give date of comments submitted*	
Evaluation of applicant's justification	*Discuss if deviating from view of rapporteur member state*	
Conclusion	*Discuss if deviating from view of rapporteur member state*	
Remarks		

Section A6.12.5 Annex Point IIA 6.12.5	**Diagnosis of poisoning including specific signs of poisoning and clinical tests**	
	JUSTIFICATION FOR NON-SUBMISSION OF DATA	Official use only
Other existing data [ ] **Limited exposure [ ]**	**Technically not feasible [ ]** **Scientifically unjustified [ ]** **Other justification [X]**	
Detailed justification:	Diagnosis of poisoning should be made based on each particular case history. Treat symptomatically. Early signs of poisoning may include nausea and vomiting; shortness of breath and laboured breathing; fine or course tremors, hypersensitivity to external stimuli and general weakness and prostration. A burning and itching sensation often follows contact. There are no established methods for determining Permethrin in body fluids. Urinary levels of 3-phenoxybenzyl degradation products may be a useful index of exposure. In addition, electrophysiological monitoring of sensory nerve potentials and central nervous and cardiac activities (EEG and ECG) may be useful in diagnosis and in assessment of therapy (ref. Data Sheet on Pesticides No. 51 Permethrin (WHO), 1984). Cl_2CA and 3-phenoxy benzoic acid can be detected in urine for monitoring purposes in pest control operator (Pfau, 2005).	
Undertaking of intended data submission [ ]	Not applicable	
	Evaluation by Competent Authorities	
	Use separate "evaluation boxes" to provide transparency as to the comments and views submitted	
	EVALUATION BY RAPPORTEUR MEMBER STATE	
Date	6th July 2009	
Evaluation of applicant's justification	WHO data sheet on permethrin should be attached.	
Conclusion	Acceptable	
Remarks		
	COMMENTS FROM OTHER MEMBER STATE *(specify)*	
Date	*Give date of comments submitted*	

Section A6.12.5 Annex Point IIA 6.12.5	Diagnosis of poisoning including specific signs of poisoning and clinical tests
Evaluation of applicant's justification	*Discuss if deviating from view of rapporteur member state*
Conclusion	*Discuss if deviating from view of rapporteur member state*
Remarks	

Section A6.12.6 Annex Point IIA 6.12.6	Sensitisation/allergenicity observations	
	JUSTIFICATION FOR NON-SUBMISSION OF DATA	Official use only
Other existing data [ ] **Limited exposure [ ]**	**Technically not feasible [ ]** **Scientifically unjustified [ ]** **Other justification [X]**	
Detailed justification:	To our knowledge, no observations of sensitisation or allergenicity have been made following use of Permethrin.	
Undertaking of intended data submission [ ]	Not applicable	
	Evaluation by Competent Authorities	
	Use separate "evaluation boxes" to provide transparency as to the comments and views submitted	
	EVALUATION BY RAPPORTEUR MEMBER STATE	
Date	*6th July 2009*	
Evaluation of applicant's justification	*Results in sensitisation studies for permethrin have been mixed and additional information regarding sensitisation would have been useful. However, the justification fulfils requirements.*	
Conclusion	*Acceptable.*	
Remarks		
	COMMENTS FROM OTHER MEMBER STATE *(specify)*	
Date	*Give date of comments submitted*	
Evaluation of applicant's justification	*Discuss if deviating from view of rapporteur member state*	
Conclusion	*Discuss if deviating from view of rapporteur member state*	
Remarks		

Section A6.12.7 Annex Point IIA 6.12.7	Specific Treatment in Case of an Accident or Poisoning: First Aid Measure, antidotes and Medical Treatment, if Known	
	JUSTIFICATION FOR NON-SUBMISSION OF DATA	Official use only
Other existing data [ ] **Limited exposure [ ]**	**Technically not feasible [ ]** **Scientifically unjustified [ ]** **Other justification [X]**	
Detailed justification:	Ensure it is safe to approach the casualty. Before giving first aid always put on personal protective equipment if you are likely to be contaminated. Always seek medical advice in cases of serious personal contamination. Remove any contaminated clothing. Keep the patient at rest and if possible under shelter. If drowsy or unconscious, place the casualty in the recovery position, maintain an open airway and loosen any constrictive clothing at neck and waist. If breathing ceases or weakens, immediately apply artificial resuscitation. If the person is conscious and breathing, apply first aid as follows: **Eye:** Hold eyelids apart and flush eye continuously with running water for 15 – 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control centre or doctor for treatment advice or if irritation persists. **Ingestion:** Immediately call a poison control centre or doctor for treatment advice. Do not give any liquid to the person. Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Do not give anything by mouth to an unconscious person. **Skin:** Remove contaminated clothing and wash with soap and running water. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice if irritation persists. **Inhalation**: Remove affected person to fresh air and apply artificial respiration if required. Seek medical advice is specific symptomatic reactions are observed There are no specific antidotes, treatment must be symptomatic. Keep the patient warm and calm. In cases of severe intoxication, therapy should include a sedative and anticonvulsant (e.g. barbiturates, diazepam, paraldehyde, etc) The use of antispasmodic drugs is of limited value, mephenesin and atrophine have been found to effectively alleviate the symptoms of Pyrethroid poisoning in laboratory animals. If a large quantity of Permethrin has been swallowed, unless the patient is unconscious or vomiting, gastric lavage should be performed using a 5% sodium bicarbonate solution, followed with powdered activated charcoal. For skin contact, soap up any liquid remaining on skin with readily disposable absorbent material, then wash the affected area with warm water and alkaline soap. If skin irritation occurs, treat with a soothing skin cream and avoid exposure to direct light. For eye contamination, wash the eye with 4% sodium bicarbonate or any other non-irritating, alkaline aqueous solution.	

Section A6.12.7 **Annex Point IIA 6.12.7**	**Specific Treatment in Case of an Accident or Poisoning: First Aid Measure, antidotes and Medical Treatment, if Known**
	(ref. Data Sheet on Pesticides No. 51 Permethrin (WHO), 1984)
Undertaking of intended data submission [ ]	Not applicable
	Evaluation by Competent Authorities
	Use separate "evaluation boxes" to provide transparency as to the comments and views submitted
	EVALUATION BY RAPPORTEUR MEMBER STATE
Date	*6th of July 2009*
Evaluation of applicant's justification	*Justification fulfils requirements.*
Conclusion	*Acceptable.*
Remarks	
	COMMENTS FROM OTHER MEMBER STATE *(specify)*
Date	*Give date of comments submitted*
Evaluation of applicant's justification	*Discuss if deviating from view of rapporteur member state*
Conclusion	*Discuss if deviating from view of rapporteur member state*
Remarks	

Section A6.12.8 Annex Point IIA 6.12.8	Prognosis following poisoning	
	JUSTIFICATION FOR NON-SUBMISSION OF DATA	Official use only
Other existing data [ ] Limited exposure [ ]	Technically not feasible [ ] Scientifically unjustified [ ] Other justification [X]	
Detailed justification:	No specific prognosis is available following accidental poisoning with Permethrin. Treat symptomatically.	
Undertaking of intended data submission [ ]	Not applicable	
	Evaluation by Competent Authorities	
	Use separate "evaluation boxes" to provide transparency as to the comments and views submitted	
	EVALUATION BY RAPPORTEUR MEMBER STATE	
Date	*6th July 2009*	
Evaluation of applicant's justification	*Justification fulfils requirements.*	
Conclusion	*Acceptable.*	
Remarks		
	COMMENTS FROM OTHER MEMBER STATE *(specify)*	
Date	*Give date of comments submitted*	
Evaluation of applicant's justification	*Discuss if deviating from view of rapporteur member state*	
Conclusion	*Discuss if deviating from view of rapporteur member state*	
Remarks		

Section A6.13 Annex Point IIIA VI.2	Toxic effects on livestock and pets	
	JUSTIFICATION FOR NON-SUBMISSION OF DATA	Official use only
Other existing data [ ]	**Technically not feasible [ ]** **Scientifically unjustified [ ]**	
Limited exposure [X]	**Other justification [ ]**	
Detailed justification:	It is proposed that this point is not relevant to Permethrin as exposure of livestock and pets to the product is unlikely to occur considering the use pattern. Furthermore, the active substance, Permethrin, is of low toxicity to mammals. Permethrin 10 EC is intended for outdoor and indoor use as a wood preservative containing 0.5% w/w Permethrin (industrial use) and 0.1% w/w Permethrin (professional and non-professional use). It is not intended for use in spaces in which animals are housed, kept or transported and exposure of drinking water or feeding-stuffs is not anticipated. It is not used in the manufacture of feeding troughs, animal bedding or beehives. Furthermore the claimed label states that the biocidal product must be kept away from food, drink and animal feedingstuff. The acute, sub acute and long-term effects of this wood preservative on the target species have been discussed in relation to tests on laboratory rodents. In addition the toxic response of Permethrin has been summarised for various species that are known to be representative and used to extrapolate effects to humans. Based on results of acute toxicity tests in the rat, Permethrin is classified as harmful if swallowed and remains unclassified by the dermal and inhalation route. It is not an eye or skin irritant. Permethrin is not a sensitiser. A 90-day study in the rat is available and is summarised under Doc IIIA, 6.4.1. Only minimal signs of toxicity such as liver weights associated with hepatocellular hypertrophy were noted in this study. In a 90 day oral study in mice, animals exhibited, at the highest dose tested, signs of toxicity such as respiratory distress, hyperactivity and tremor. A 90 day dermal study in the rat is also available and is summarised under Doc IIIA, 6.4.2. Clinical signs such as piloerection and tremors were noted. A 90-day inhalation study was also conducted in the rat and is summarised under Doc IIIA, 6.4.3. Rats exhibited nasal irritation and mild tremors at the highest dose tested (0.4363 mg/l). A two year combined chronic/carcinogenicity study in rats is currently ongoing which should provide further information in a second species. Furthermore, Permethrin is neither genotoxic, nor teratogenic. In a two generation study in the rat no treatment related effects were reported. In conclusion, there are no ethical grounds (that would not contravene the requirements of Directive 86/609/EC which advises against unnecessary testing using animals) for performing further studies on animals. It is therefore proposed that no additional investigations are required to address this point.	

Section A6.13 Annex Point IIIA VI.2	**Toxic effects on livestock and pets**
Undertaking of intended data submission [ ]	Not applicable
	Evaluation by Competent Authorities
	Use separate "evaluation boxes" to provide transparency as to the comments and views submitted
	EVALUATION BY RAPPORTEUR MEMBER STATE
Date	*9th July 2009*
Evaluation of applicant's justification	*The applicants justification fulfils the requirements and is acceptable.*
Conclusion	*Justification accepted.*
Remarks	
	COMMENTS FROM OTHER MEMBER STATE *(specify)*
Date	*Give date of comments submitted*
Evaluation of applicant's justification	*Discuss if deviating from view of rapporteur member state*
Conclusion	*Discuss if deviating from view of rapporteur member state*
Remarks	

Section A6.14 Annex Point IIIA-XI.2	Other test(s) related to the exposure of humans	
	JUSTIFICATION FOR NON-SUBMISSION OF DATA	Official use only
Other existing data [ ] **Limited exposure [ ]**	**Technically not feasible [ ]** **Scientifically unjustified [ ]** **Other justification [X]**	
Detailed justification:	This data is not required for Permethrin, as no irritating or sensitising effects have been reported following its use. No incidences of adverse effects or poisoning cases have been published following worker exposure to product containing Permethrin. Please refer to Doc IIIA, 6.12.1. Reaction products or by-products produced during the manufacturing process are not expected to be of toxicological concern based on the fact that no adverse effects have been reported at the manufacturing plant (Premnadh, 2006). Furthermore, no degradation products have been reported for Permethrin in the environmental compartments or during the manufacturing process. The synthesis pathway for Permethrin is presented as confidential information in Doc III – confidential information Section 2.6 for Tagros Chemicals India Ltd. It is therefore considered that no further testing is required to address this point.	
Undertaking of intended data submission [ ]	Not applicable	
	Evaluation by Competent Authorities	
	Use separate "evaluation boxes" to provide transparency as to the comments and views submitted	
	EVALUATION BY RAPPORTEUR MEMBER STATE	
Date	*9th July 2009*	
Evaluation of applicant's justification	*The statement that irritating or sensitising effects have not been reported for permethrin in incorrect. Permethrin is currently classified as a sensitising agent and a number of positive sensitisation studies are available for it. In addition, the statement regarding environmental metabolites is also incorrect.*	
Conclusion	*The arguments made by the applicant regarding further exposure testing are not valid. However, human exposure has been evaluated in document IIB via the appropriate TNsG exposure models and no further testing is required.*	
Remarks		
	COMMENTS FROM OTHER MEMBER STATE *(specify)*	
Date	*Give date of comments submitted*	

Section A6.14 Annex Point IIIA-XI.2	Other test(s) related to the exposure of humans
Evaluation of applicant's justification	*Discuss if deviating from view of rapporteur member state*
Conclusion	*Discuss if deviating from view of rapporteur member state*
Remarks	

Section A6.15 **Annex Point IIIAVI.4**	**Food and feedingstuffs**	
	JUSTIFICATION FOR NON-SUBMISSION OF DATA	Official use only
Other existing data [ ] **Limited exposure [X]**	**Technically not feasible [ ] Scientifically unjustified [ ]** **Other justification [ ]**	
Detailed justification:	Proposed acceptable residue levels are not required for product type 8 wood preservatives, according to Directive 98/8/EC. Permethrin 10 EC is only used in non-food/feed areas in industrial plant, outdoor and indoor for wood preservation treatment purposes. Permethrin will not be applied to wood which comes into contact with foodstuff and food and feedstuff will not be stored in wood containers treated with Permethrin. Exposure of food and feedingstuffs to the product is unlikely to occur considering its use pattern. Furthermore, the claimed label states that the biocidal product must be kept away from food, drink and animal feedingstuff and as such Permethrin 10 EC will not be used for direct application to food or feeding stuffs. The biocidal product contains only 0.54.35 % w/w Permethrin (industrial use) and 0.1087% w/w Permethrin (professional and non-professional uses) and is not classified as harmful to humans. Therefore, it is reasonable to conclude that exposure of food and feedingstuffs to the active substance will not occur considering the use pattern of the biocidal product and tests to determine residues in food and feedingstuffs are unnecessary. This justification also applies to point 6.15.1 to 6.15.6.	
Undertaking of intended data submission [ ]	Not applicable	
	Evaluation by Competent Authorities	
	Use separate "evaluation boxes" to provide transparency as to the comments and views submitted	
	EVALUATION BY RAPPORTEUR MEMBER STATE	
Date	*9th July 2009*	
Evaluation of applicant's justification	*As a wood preservative permthrin is not expected to come into contact with food stuffs.*	
Conclusion	*The applicant's justification is acceptable.*	
Remarks		
	COMMENTS FROM OTHER MEMBER STATE *(specify)*	
Date	*Give date of comments submitted*	

Section A6.15 Annex Point IIIAVI.4	Food and feedingstuffs
Evaluation of applicant's justification	*Discuss if deviating from view of rapporteur member state*
Conclusion	*Discuss if deviating from view of rapporteur member state*
Remarks	

Section A6.16 **Annex Point IIIAVI.3.5,XI.2**	**Any other tests related to the exposure of the active substance to humans**	
	JUSTIFICATION FOR NON-SUBMISSION OF DATA	Official use only
Other existing data [ ] **Limited exposure [ ]**	**Technically not feasible [ ]** **Scientifically unjustified [ ]** **Other justification [X]**	
Detailed justification:	No other additional tests relating to exposure of Permethrin, other than those outlined in previous data points, are considered necessary at this time.	
Undertaking of intended data submission [ ]	Not applicable	
	Evaluation by Competent Authorities	
	Use separate "evaluation boxes" to provide transparency as to the comments and views submitted	
	EVALUATION BY RAPPORTEUR MEMBER STATE	
Date	*10th July 2009*	
Evaluation of applicant's justification	*Exposure to the active appears to be adequately covered via the risk assessment in document IIB.*	
Conclusion	*The applicant's justification is acceptable.*	
Remarks		
	COMMENTS FROM OTHER MEMBER STATE *(specify)*	
Date	*Give date of comments submitted*	
Evaluation of applicant's justification	*Discuss if deviating from view of rapporteur member state*	
Conclusion	*Discuss if deviating from view of rapporteur member state*	
Remarks		

Section A6.17 Annex Point IIIAVI.6	**If the active substance is to be used in products for action against plants then tests to assess toxic effects of metabolites from treated plants where different from those identified in animals shall be required**	
	JUSTIFICATION FOR NON-SUBMISSION OF DATA	Official use only
Other existing data [ ] **Limited exposure [ ]**	**Technically not feasible [ ]** **Scientifically unjustified [X]** **Other justification [ ]**	
Detailed justification:	Since this dossier for PT8 does not recommend use of Permethrin for action against plants, tests to assess toxic effects of metabolites from treated plants are not required in this case.	
Undertaking of intended data submission [ ]	Not applicable	
	Evaluation by Competent Authorities	
	Use separate "evaluation boxes" to provide transparency as to the comments and views submitted	
	EVALUATION BY RAPPORTEUR MEMBER STATE	
Date	*10th July 2009*	
Evaluation of applicant's justification	*As the substance is an insecticide this testing is not relevant.*	
Conclusion	*The applicant's justification is acceptable.*	
Remarks		
	COMMENTS FROM OTHER MEMBER STATE *(specify)*	
Date	*Give date of comments submitted*	
Evaluation of applicant's justification	*Discuss if deviating from view of rapporteur member state*	
Conclusion	*Discuss if deviating from view of rapporteur member state*	
Remarks		

Section A6.18 Annex Point IIIAVI.6	Summary of mammalian toxicology and conclusions	
	JUSTIFICATION FOR NON-SUBMISSION OF DATA	Official use only
Other existing data [ ] **Limited exposure [ ]**	**Technically not feasible [ ]** **Scientifically unjustified [X]** **Other justification [ ]**	
Detailed justification:	For details on mammalian toxicology and conclusions, please refer to Doc IIA.	
Undertaking of intended data submission [ ]	Not applicable	
	Evaluation by Competent Authorities	
	Use separate "evaluation boxes" to provide transparency as to the comments and views submitted	
	EVALUATION BY RAPPORTEUR MEMBER STATE	
Date	*13th July 2009*	
Evaluation of applicant's justification	*Details of the mammalian toxicology are given in document IIA as stated by the applicant.*	
Conclusion	*The applicant's justification is acceptable.*	
Remarks		
	COMMENTS FROM OTHER MEMBER STATE *(specify)*	
Date	*Give date of comments submitted*	
Evaluation of applicant's justification	*Discuss if deviating from view of rapporteur member state*	
Conclusion	*Discuss if deviating from view of rapporteur member state*	
Remarks		