



**FORM
FOR NOTIFICATION OF FINAL REGULATORY ACTION
TO BAN OR SEVERELY RESTRICT A CHEMICAL**

IMPORTANT: See instructions before filling in the form

COUNTRY: CANADA

PART I: PROPERTIES, IDENTIFICATION AND USES

1. IDENTITY OF CHEMICAL		
1.1	Common name	cyhexatin
1.2	Chemical name according to an internationally recognized nomenclature (e.g. IUPAC), where such nomenclature exists	IUPAC: tricyclohexyltin hydroxide CAS: tricyclohexylhydroxystannane
1.3	Trade names and names of preparations	Plictran 50W Miticide
1.4	Code numbers	
1.4.1	CAS number	13121-70-5
1.4.2	Harmonized System customs code	Not Applicable/Available
1.4.3	Other numbers (specify the numbering system)	RTECS #: WH8750000 EINECS/ELINCS #: 236-049-1
1.5	Indication regarding previous notification on this chemical, if any	
1.5.1	<input checked="" type="checkbox"/> This is a first time notification of final regulatory action on this chemical.	
1.5.2	<input type="checkbox"/> This is a modification of a previous notification of final regulatory action on this chemical. The sections modified are: _____	
	<input type="checkbox"/> This notification replaces all previously submitted notifications on this chemical.	
	Date of issue of the previous notification: _____	

PLEASE RETURN THE COMPLETED FORM TO:

Secretariat for the Rotterdam Convention
Plant Protection Service
Plant Production and Protection Division, FAO
Viale delle Terme di Caracalla
00100 Rome, Italy

OR

Secretariat for the Rotterdam Convention
UNEP Chemicals

11-13, Chemin des Anémones
CH - 1219 Châtelaine, Geneva, Switzerland

Tel: (+39 06) 5705 3441
Fax: (+39 06) 5705 6347
E-mail: pic@fao.org

Tel: (+41 22) 917 8183
Fax: (+41 22) 797 3460
E-mail: pic@unep.ch

1.6 Information on hazard classification where the chemical is subject to classification requirements	
International classification systems	Hazard class
WHO	III-229 - slightly hazardous
Other classification systems	Hazard class
EU	Xn;N - Harmful; Dangerous for the environment.

1.7 Use or uses of the chemical	
1.7.1	<input checked="" type="checkbox"/> Pesticide
	Describe the uses of the chemical as a pesticide in your country:
	Used in orchards and greenhouses to control mites on apples, pears, peaches, nectarines, strawberries, hops, non-bearing raspberries, and ornamentals
1.7.2	<input type="checkbox"/> Industrial
	Describe the industrial uses of the chemical in your country:

1.8 Properties	
1.8.1	Description of physico-chemical properties of the chemical
	Appearance and Odour: colourless to white crystalline powder; nearly odourless
	Molecular Weight: 385.02
	Melting Point: 195-198 deg C (383-388 deg F)
	Boiling Point: 228 deg C (442 deg F) (decomposes)
	Solubility: Insoluble in water; soluble in acetone, chloroform, methanol
	Vapour Pressure: Approximately zero
	REF: CHEMINFO, Canadian Centre for Occupational Health and Safety. 2000. CD library.

1.8.2	Description of toxicological properties of the chemical
	acceptable daily intake - 0.001 mg/kg FAO/WHO
	<u>Acute Toxicity</u>
	LD ₅₀ rat oral 85 to 820 mg/kg bw
	mouse, rabbit, guinea pig and chicken 500-1150 mg/kg bw
	LD50 Rat intraperitoneal 13 mg/kg
	LD50 Rabbit percutaneous >2000 mg/kg
	<u>Short Term</u>
	90-day dietary Wistar rat NOAEL 25 ppm (~ 1.5 mg/kg bw)
	90-day dietary mouse NOAEL 25 ppm (~ 3.75 mg/kg bw)
	90 day dietary dog. NOEL 3 mg/kg bw (copper levels)
	<u>Long Term</u>
	2-year dietary rat NOAEL 6 mg/kg bw
	2-year dietary rat NOEL for in-life parameters <1 mg/kg bw
	2-year dietary mouse NOEL 3 mg/kg bw no evidence of an oncogenic effect at levels of up to 6 mg/kg bw
	Two-year dietary dog failed to indicate a NOEL

	<u>Teratogenicity</u> Rabbit NOEL 1.0 mg/kg bw; NOEL for embryo/ fetotoxicity 0.5mg/kg bw Rats NOAEL 1.0\mg/kg bw <u>Reproduction</u> Rats NOEL of 12.5 ppm (~ 0.75 mg/kg bw) Rabbit NOAEL \geq 3 mg/kg bw REF: Decision Document E89-01, June 1989. Canada. CHEMINFO, Canadian Centre for Occupational Health and Safety. 2000. CD library.
1.8.3	Description of ecotoxicological properties of the chemical LC50 Large mouth bass 2.1 UG/L/96 HR LC50 Scud 5 UG/L/96 HR LC50 Bluegill sunfish 6.7 UG/L/96 HR LD50 Bobwhite quail 520 mg/kg 8 day dietary REF: CHEMINFO, Canadian Centre for Occupational Health and Safety. 2000. CD library.

PART II: FINAL REGULATORY ACTION

2.	FINAL REGULATORY ACTION
2.1	The chemical is: <input checked="" type="checkbox"/> banned OR <input type="checkbox"/> severely restricted
2.2	Information specific to the final regulatory action
2.2.1	Summary of the final regulatory action <ul style="list-style-type: none"> • No pest control uses are allowed • Dow announced voluntary withdrawal of the product from the market, supported by a stock return and refund program coordinated through local dealers. • CAPCO Note in August 1987 cautioned women who are or may be pregnant against working in treated orchards or fields. • Dow took corporate decision to abandon further interest in Plictran and asked for original registration to be cancelled • Agriculture Canada put growers on notice that Health and Welfare Canada has revoked residue tolerances, effective January 29, 1989.
2.2.2	Reference to the regulatory document Decision Document E89-01 CAPCO Note C87-11
2.2.3	Date of entry into force of the final regulatory action December 31, 1989

2.3	Was the final regulatory action based on a risk or hazard evaluation?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	If yes, give information on such evaluation	
	A review of teratology studies in rats and rabbits indicated chemical to be teratogenic; margins of safety were considered to be low even in cases where a rubber suit and gloves were utilized	
	Reference to the relevant documentation	
	Decision Document E89-01 CAPCO Note C87-11	

2.4	Reasons for the final regulatory action	
2.4.1	Is the reason for the final regulatory action relevant to the human health?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	If yes, give summary of the known hazards and risks presented by the chemical to human health, including the health of consumers and workers	
	<ul style="list-style-type: none"> • teratogenic in rats and rabbits at low doses (see S 1.8.2) • margin of safety low even in cases where a rubber suit and gloves were utilized 	
	Reference to the relevant documentation	
	Decision Document E89-01 CAPCO Note C87-11	
	Expected effect of the final regulatory action	
	Removal of risk to orchard/field workers where Piclam was used.	
2.4.2	Is the reason for the final regulatory action relevant to the environment?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	If yes, give summary of the known hazards and risks to the environment	
	Reference to the relevant documentation	
	Expected effect of the final regulatory action	

2.5	Category or categories where the final regulatory action has been taken	
2.5.1	Final regulatory action has been taken for the chemical category	<input type="checkbox"/> Industrial
	Use or uses prohibited by the final regulatory action	
	Use or uses that remain allowed	
2.5.2	Final regulatory action has been taken for the chemical category	<input checked="" type="checkbox"/> Pesticide
	Formulation(s) and use or uses prohibited by the final regulatory action	
	All formulations prohibited from import, sale or use.	
	Formulation(s) and use or uses that remain allowed	
	None	

2.5.3 Estimated quantity of the chemical produced, imported, exported and used, where available.		
	Quantity per year (MT)	Year
Produced		
Imported		
Exported		
Used		

2.6 Indication, to the extent possible, of the likely relevance of the final regulatory action to other states and regions	
	Conditions of exposure are may occur in other regions where cyhexatin is used.

2.7 Other relevant information that may cover:	
2.7.1	<p>Assessment of socio-economic effects of the final regulatory action</p> <p>Plictran was an effective miticide which generated high returns to fruit producers. Apple growers could expect \$8.50 for every dollar spent on Plictran, while strawberry and hops growers in British Columbia could expect anywhere from \$17 to \$74.</p> <p>“It is difficult to anticipate the long-term consequences of removing Plictran from the market. In the short term, it is evident that the use of other chemicals such as Apollo, Omite, Dicofol and Superior Oil will increase. However, in the long run, alternating these chemicals might not be sufficient to prevent pest resistance. In this case, unless other pesticides are introduced onto the market, some industries like raspberry, strawberry and hop production would likely become too vulnerable to mite damage to remain viable.”</p> <p>REF: Decision Document E89-01, June 1989. Canada.</p>
2.7.2	<p>Information on alternatives and their relative risks</p> <ul style="list-style-type: none"> - dicofol - mite resistance - omite (propargite) - less effective, some resistance, some phytotoxicity - carzol (formetanate hydrochloride) - mite resistance - ethion - high toxicity - dienochlor - fenbutatin oxide - clofentezine - chinomethionat - dormant oils
2.7.3	<p>Relevant additional information</p>

PART III : GOVERNMENT AUTHORITIES

Ministry/Department and authority responsible for issuing/enforcing the final regulatory action	
Institution	Pest Management Regulatory Agency, Health Canada
Address	2720 Riverside Drive Ottawa, Ontario K1A 0K9 Canada
Telephone	+1 613-736-3660
Telefax	+1 613-736-3659
E-mail address	Trish_MacQuarrie@hc-sc.gc.ca
Designated National Authority	
Institution	Pest Management Regulatory Agency, Health Canada
Address	2720 Riverside Drive Ottawa, Ontario K1A 0K9 Canada
Name of person in charge	Trish MacQuarrie
Position of person in charge	Director, Alternative Strategies and Regulatory Affairs Division
Telephone	+1 613-736-3660
Telefax	+1 613-736-3659
E-mail address	Trish_MacQuarrie@hc-sc.gc.ca

Date, signature of DNA and official seal: _____

