MATERIAL SAFETY DATA SHEET CATALYST™ INSECTICIDE/ACARACIDE EMULSIFIABLE CONCENTRATE

Manufacturer:	Wellmark International	
Address:	1501 East Woodfield Road, Suite 200W Schaumburg, IL 60173	
Emergency Phone:	1-800-248-7763	
Transportation Emergency Phone:	CANUTEC 613-996-6666	

Supplier:

Wellmark International 100 Stone Road West, Suite 111, Guelph, Ontario N1G 5L3 1-800-263-2740

1. CHEMICAL PRODUCT INFORMATION

Product Name:	Catalyst [™] Insecticide/Acaracide Emulsifiable Concentrate
Chemical Name/Synonym:	Propetamphos: {(E)-1-methylethyl 3-[[(ethylamino) methoxyphosphinothioyl]oxy]-2-butenoate
Chemical Family:	Organophosphate
Formula:	C10 H20 N O4 PS
PCP Registration No.:	25,149
RF Number:	9001

2. COMPOSITION / INFORMATION ON INGREDIENTS

Component (chemical, common name)	<u>CAS</u> <u>Number</u>	<u>Weight</u>	<u>Tolerance</u>
Propetamphos: {(E)-1-methylethyl 3- {{(ethylamino)methoxyphosphinothioyl}oxy}-2-butenoate}	31218-83-4	18.9%	Not established
Inert Ingredients (non-hazardous and/or trade secret):		81.1%	Not established

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENT

WARNING: Keep out of the reach of children. Wear a long-sleeve shirt, long pants, shoes, socks, chemical resistant gloves and a NIOSH approved respirator when mixing, loading or applying and during clean-up activities. May be fatal if swallowed. Harmful if swallowed, inhaled or absorbed through the skin, eyes or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking or using tobacco. Remove contaminated clothing and wash contaminated clothing before reuse.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

This product contains a cholinesterase inhibiting compound. Early symptoms are unspecific and may include headache, nausea, vomiting, salivation, sweating, and constricted pupils. If the exposure is severe, symptoms such as diarrhea, tightness in chest, slowing of pulse, and difficulty in breathing may be observed.

PRIMARY ROUTE OF ENTRY

Dermal/Eye:

<u>Oral:</u> Yes

Inhalation No

Page 1 of 4

Yes

ACUTE TOXICITY	Oral:	LD50 (rat): 451 mg/kg	
	Dermal:	LD50 (rabbit): 2723 mg/kg	
	Inhalation:		
	initialation		
OTHER TOXICOLOG	ICAL INFORI	MATION	
SI	kin Irritation:	Mild irritant (rabbit)	
E	ye Irritation:	Mild transient irritant (rabbit)	
	Sensitizer:	Non-sensitizing (guinea pig)	
4. FIRST AID MEASURE	ES		
	Eye:	Flush with plenty of water. If irritation persists, consult a physician	
	Skin:	Wash with soap and water. Get medical attention if irritation persists.	
	Ingestion:	Call a physician or poison control center. Drink 1 or 2 glasses of water and	
		induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person.	
	Inhalation:	Remove to clean air - if not breathing give artificial respiration, preferably mouth-to-mouth	
Note t	o Physician:	Propetamphos, an organophosphate compound, is a cholinesterase inhibitor. Atropine with 2-PAM if symptoms of cholinesterase inhibition are present.	
5. FIRE FIGHTING MEA	SURES		
N	FPA Rating:	Health: 3 Fire: 2 Reactivity: 0	
	HPA Rating: ability Class:	Health: 3 Fire: 2 Reactivity: 0 Combustible liquid	
Flamma	-	····· · · · · · · · · · · · · · · · ·	
Flamma	ability Class: Flash Point:	Combustible liquid	
Flamma Explosive Limits (%	ability Class: Flash Point:	Combustible liquid >194F (90C	
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. E XPOSURE CONTROL / PERSONAL MEASURES

Exposure Limits:	Not established
Ventilation:	Use with adequate ventilation.
Personal Protective Equipment:	If prolonged or excessive exposure is anticipated, it is recommended for handlers to wear a NIOSH/MSHA approved organic vapor/pesticide respirator, impervious gloves, goggles and other appropriate clothing to avoid breathing vapors or skin contact. White to yellow-white milky emulsion, with orange-citrus to mild sulfurish odor.
Boiling Point:	>100C
Melting Point:	<32F (0C
Vapor Pressure (mm Hg):	Not known
Vapor Density (Air = 1):	Not known
Specific Gravity:	1.08
Bulk Density:	9 lbs/gal
Solubility:	Emulsifies in water
Evaporation Rate:	Not known
pH:	5 - 7

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: White to yellow-white milky emulsion, with orange-citrus to mild sulfurish odor.

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Evaporation Rate:	Not known
pH:	5 - 7

10. STABILITY AND REACTIVITY

Stability:	Stable
Reactivity:	Non-reactive
Incompatibility w/ Other Materials:	Strong oxidizing agents
Decomposition Products:	Oxides of sulfur and nitrogen may form under conditions of extreme heat
Hazardous Polymerization:	Will not occur

11. TOXICOLOGICAL INFORMATION

CHRONIC TOXICITY [Specific to Active Ingredient(s)]

No evidence of oncogenicity was observed in a chronic dietary study in rats, where propetamphos was fed continuously for 2 years at levels up to 120 ppm.

DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Specific to Active Ingredient(s)]

No adverse effect was observed on the reproductive performance of rats up to mid dose level of 30 ppm. At the 75 ppm level, some parameters of reproductive performance were affected. The 4 ppm dose level was suggested as the NOEL for overall effects.

MUTAGENICITY [Specific to Active Ingredient(s)]

Propetamphos is not considered as a mutagenic compound.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE [Active Ingredients Only] Hydrolysis: 1 year (pH6)

Photolysis:> 2 yearsSoil half life:Not applicableWater solubility:110 ppm

ECOTOXICITY [Active Ingredients Only]

Acute Toxicity: fish:LC50 (rainbow trout): 2.650 mg/L (bluegill sunfish): 1.100 mg/L (96 hour stu invertebrates:LC50 (Daphnia magna): 3.3 ug/L (48 hour study)

13. DISPOSAL CONSIDERATIONS

Triple-or pressure-rinse the emptied container thoroughly and add the rinsings to the spray mixture in the tank. Follow provincial instructions for any required additional cleaning of the container prior to its disposal. Make the empty container unsuitable for further use and dispose in accordance with Provincial requirements. For information on the disposal of unused, unwanted product, contact the manufacture or the provincial regulatory agency. Contact the manufacturer and the provincial regulatory agency in case of a spill and for clean-up of spills.

14. TRANSPORTATION INFORM	ATION	
TDG Shipping Description	TDG Symbols	Special Shipping Information
Consumer Commodity	N/A	N/A
15. REGULATORY INFORMATIO	N	
WHMIS Classification	WHMIS Symbols	Statement
Not a controlled product	N/A	This product has been regulated under the Pest Control Products Acts, and is exempt from WHMIS requirements.
Other Regulatory Information:		
NI/A		

N/A

16. OTHER INFORMATION

None

The information presented herein, while not guaranteed, was prepared by technically knowledgeable personnel and to the best of our knowledge is true and accurate. It is not intended to be all inclusive and the manner and conditions of use and handling may involve other or additional considerations.