Date Issued: January 2013

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: Yes Oral: Yes Inhalation No

ACUTE TOXICITY Oral: LD50 (rat): 451 mg/kg

Dermal: LD50 (rabbit): 2723 mg/kg

Inhalation: LC50 (rat): .98 mg/L (4 hour study) (estimate based on similar product)

OTHER TOXICOLOGICAL INFORMATION

Skin Irritation: Mild irritant (rabbit)

Sensitizer: Mild transient irritant (rabbit) **Sensitizer:** Non-sensitizing (guinea pig)

4. FIRST AID MEASURES

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 to Physician: Propetamphos, an organophosphate compound, is a cholinesterase inhibitor.

Atropine with 2-PAM if symptoms of cholinesterase inhibition are present.

5. FIRE FIGHTING MEASURES

NFPA Rating: Health: 3 Fire: 2 Reactivity: 0

Flammability Class: Combustible liquid

Flash Point: >194F (90C

Explosive Limits (% of Volume): Not known

Extinguishing Media: Water, foam, CO2, dry chemical

Special Protective Equipment: Firefighters should wear protective clothing, eye protection and self-contained

breathing apparatus.

Fire Fighting Procedures: Do not allow run-off to enter waterways inhabited by aquatic organisms

Combustion Products: Possible oxides of sulfur, nitrogen and carbon from incomplete combustion

Unusual Fire/Explosion Hazards: None

6. ACCIDENTAL RELEASE MEASURES

Steps to be taken: Absorb all spills. Place all contaminated materials in a container for disposal.

Absorbents: Clay granules, sawdust, dirt or equivalent.

Incompatibles: Strong oxidizing agents

7. HANDLING AND STORAGE

Handling: Avoid contact with skin, eyes, and clothing. Avoid inhalation

Storage: Store in a cool, dry and ventilated area away from humans, pets, foodstuffs

and feed. Do not store near heat or open flame. Keep from freezing

8. 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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pH: 5-7

10. STABILITY AND REACTIVITY

Stability: Stable

Reactivity: Non-reactive

Incompatibility w/ Other Strong oxidizing agents

Materials:

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 years

Soil half life: Not applicable

Water 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 INFORMATION

TDG Shipping Description TDG Symbols Special Shipping Information

Consumer Commodity N/A N/A

15. REGULATORY INFORMATION

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:

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.