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Date of Issue: January 2001

MATERIAL SAFETY DATA SHEET

STATEMENT OF HAZARDOUS NATURE:

Hazardous according to the criteria of NOHSC Australia

COMPANY DETAILS:

Syngenta Crop Protection Pty Limited Telephone No.: (02) 9688 0444

ABN 33 002 933 717 140-150 Bungaree Rd., PENDLE HILL, NSW, 2145 24 Hours Emergency No.: 1 800 033 111

IDENTIFICATION

PRODUCT NAME: AGRIMEC® MITICIDE/INSECTICIDE

Formulation type: Emulsifiable concentrate UN number: 2902
Active ingredient: Abamectin Dangerous goods class: 6.1

Product code: A-8612A Subsidiary risk: None allocated

Chemical type:Macrocyclic lactoneHazchem code:2XPoisons schedule:6Packing group:IIIEPG/IERG:6B1/34

USE: For the control of certain mites and insect pests on various crops.

PHYSICAL DESCRIPTION/PROPERTIES

Appearance: Colourless to yellow liquid Flash point: 71°C (closed cup) Hexanol odour Non flammable Odour: Flammability: **Boiling/Melting point:** 150-155°C (AI) Combustibility: Combustible C1 <2 x 10⁻⁴ mPa (AI) Vapour pressure: Solubility in water: $7 - 10 \mu g/L \text{ at } 20^{\circ}\text{C (AI)}$

Specific gravity: 0.90 to 0.92 at 25°C

OTHER PROPERTIES

pH: 3.6 (CIPAC MT 75.2) Corrosiveness: Non corrosive to HDPE or steel

INGREDIENTS

CAS No. Content (% w/v) 65195-55-3 / 65195-56-4 **Abamectin** 2.0 111-27-3 10-<30% Hexanol Methyl pyrrolidone 872-50-4 10-<30% Butylated hydroxytoluene 128-37-0 <10% Other ingredients determined not to be hazardous to 100

HEALTH HAZARD INFORMATION

HEALTH EFFECTS

ACUTE TOXICITY

This product is HARMFUL according to NOHSC Australia

Swallowed: HARMFUL

Tests indicate this product is harmful following single doses of a similar formulation.

 $(LD_{50} = approx. 325 mg/kg)$

Dermal absorption: NOT HARMFUL

Tests on rabbits indicate this product is not harmful following skin contact with a

similar formulation. ($LD_{50} > 2000 \text{ mg/kg}$)

Inhaled: HARMFUL

Tests indicate this product is harmful due to inhalation of a similar formulation.

(LC₅₀ (4 h) 3.5 mg/L)

Note

Pure abamectin is considered highly toxic in acute animal studies. The acute oral toxicity studies of abamectin have shown clear differences among species in sensitivity to abamectin toxicity. Rodents are uniquely sensitive compared to the other species in which the compound has been tested. It is therefore inappropriate to base human risk assessment on the response in rodents.

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Irritation

Eye: SLIGHT IRRITANT
Skin: SLIGHT IRRITANT

Sensitisation

Skin: NOT A SENSITISER

Poisoning Symptoms:

No case of human poisoning due to this product is on record. The poisoning symptoms observed in laboratory studies include decreased activity, slow rate of breathing, dilation of the pupils, muscle tremors and lack of coordination.

CHRONIC TOXICITY (Active Ingredient)

Abamectin technical has been extensively tested in mammals and in test tube systems. No evidence of mutagenic or carcinogenic effects was obtained. Abamectin and its delta-8,9 isomer have caused foetal abnormalities including cleft palate, skeletal abnormalities and abdominal wall defects in mice and rabbits at doses toxic to the mother. These effects are considered to be not relevant to normal exposure to this product as the effects on the foetus occurred at doses which were toxic to the mother.

FIRST AID

In case of poisoning by any exposure route contact a doctor or Poisons Information Centre. Phone 131 126.

Swallowed: If swallowed contact a doctor or Poisons Information Centre.

Eye: If product gets in eyes hold eyes open, flush with running water for at least 15 minutes and

see a doctor.

Skin: If skin contact occurs remove contaminated clothing and wash affected areas thoroughly

with soap and water. Wash contaminated clothing before re-use.

Inhaled: Move person to fresh air and keep at rest until recovered. If any signs or symptoms occur

or persist, get medical attention.

ADVICE TO DOCTOR

No specific antidote is available. Treat symptomatically.

PRECAUTIONS FOR USE

ALWAYS READ AND FOLLOW THE LABEL INSTRUCTIONS AND WARNINGS

EXPOSURE STANDARDS

Ingredient Occupational Exposure Limit

Abamectin 40µg/m³ (Internal exposure control limit during manufacture/

formulation of the product. A NOHSC exposure standard has not

been assigned to abamectin.)

Mineral Oil Mists (Parrafinic Oil): 5 mg/m³ (NOHSC - time weighted average.)
Butylated Hydroxytoluene: 10 mg/m³ (NOHSC - time weighted average.)
No official exposure standards have been set for the other ingredients of this product.

Exposure Potential - Swallowing is unlikely under normal conditions of usage. Significant skin uptake does not occur. Inhalation is a possible route of exposure. This product is diluted with water prior to use as a spray. This diluted form is less toxic by all routes of exposure.

Re-entry Period - Under field conditions the spray should be allowed to dry on the foliage before reentry into treated areas.

DO NOT allow entry into treated areas in glasshouses for 24 hours after treatment. When prior entry is necessary, wear cotton overalls buttoned to the neck and wrist and elbow-length butyl rubber gloves.

ENGINEERING CONTROLS

No special requirements when product is used outdoors.

For space applications, wear cotton overalls buttoned to the neck and wrist, a washable hat, elbow-length butyl rubber gloves, goggles, and a half facepiece respirator with dust cartridge or canister.

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PERSONAL PROTECTION

Poisonous if absorbed by skin contact or swallowed. Will damage eyes. Will irritate the skin. Avoid contact with eyes and skin. DO NOT inhale spray mist. When opening the container, preparing spray and using prepared spray, wear:

- cotton overalls buttoned to the neck and wrist,
- a washable hat,
- elbow-length butyl rubber gloves, and
- goggles.

For space applications, wear:

- cotton overalls buttoned to the neck and wrist,
- a washable hat,
- elbow-length butyl rubber gloves,
- · goggles, and
- half facepiece respirator with dust cartridge or canister.

If product in eyes, wash it out immediately with water. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves, goggles, respirator (and if rubber, wash with detergent and warm water) and contaminated clothing. Only use protective equipment bearing the mark of the Standards Association of Australia.

FLAMMABILITY

This product is NON-FLAMMABLE, however it is combustible.

SAFE HANDLING INFORMATION

STORAGE AND TRANSPORT

Stable under normal conditions of use. Store bottle in carton to protect from light and store below 30°C. Store in tightly sealed original containers in a dry secure place away from fertilisers, seed, feed and food. Store out of direct sunlight. Keep out of reach of children, unauthorised persons and animals.

Store and transport according to the requirements for a Class 6.1 dangerous good and a Schedule 6 poison.

Transport Classification – Land (ADG) and Sea (IMDG):

UN No.: 2902 Proper Shipping Name: PESTICIDE, LIQUID, TOXIC, N.O.S.

Class: 6.1 (CONTAINS ABAMECTIN)

Packing Group: III Additional Information: ABAMECTIN 2%, MARINE POLLUTANT

SPILLS AND DISPOSAL

In case of spillage it is important to take all steps necessary to:

- Avoid eye and skin contact.
- · Avoid contamination of waterways.
- Shut off all possible sources of ignition. DO NOT smoke.

Procedure for spill:

- (1) Keep all bystanders away.
- (2) Wear full length clothing and butyl rubber gloves.
- (3) Re-position any leaking containers so as to minimise further leakage.
- (4) Dam and absorb spill with an absorbent material (e.g. sand or soil).
- (5) Shovel the absorbed spill into drums.
- (6) Disposal of the absorbed material will depend upon the extent of the spill.
 - For quantities up to 50L of product bury in a secure landfill site.
 - For quantities greater than 50L seek advice from the manufacturer (use emergency contact number below) before attempting disposal. Contain in a secure location until disposal method is established.
- (7) Decontaminate the spill area with detergent and water and rinse with the smallest volume of water practicable

Dispose of empty, used containers by:

- (a) Triple rinsing or preferably pressure rinsing containers with water. Add the rinsings to the spray tank. DO NOT dispose of undiluted chemicals on site.
- (b) If recycling, replace cap and return clean containers to recycler or designated collection point.
- (c) If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

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FIRE/EXPLOSION HAZARD

This product is non-flammable, non-explosive and is combustible. Extinguish warehouse and factory fires using fine-water spray or foam. During a fire this product may release smoke and hazardous decomposition products. When fighting a major fire wear an air-supplied respirator. Do not allow fire-water to enter drains.

OTHER INFORMATION

The active ingredient Abamectin is toxic to bees and very toxic to certain aquatic species. Avoid contact of spilled materials and runoff with soil and surface waterways. DO NOT contaminate streams, rivers or waterways with the chemical or used containers.

Rainbow trout, *Oncorhynchus mykiss*, LC_{50} (96 h) = 3.2 ug/L Water flea, *Daphnia magna*, EC_{50} (48 h) = 0.34 ppb Mysid shrimp, *Mysidopsis bahia*, EC_{50} (96 h) = 0.022 ppb

Note: This product is a registered agricultural chemical and must therefore be used in accordance with the container label directions. A comprehensive package of toxicological and environmental data for the active ingredients of this product has been submitted to the Federal health and environment authorities and has been evaluated by expert toxicologists and environmental scientists.

CONTACT POINT: Regulatory Affairs Manager - Crop Protection - (02) 9688 0444

24 HOURS EMERGENCY CONTACT: 1 800 033 111

This Material Safety Data Sheet summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company.

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