

MATERIAL SAFETY DATA SHEET

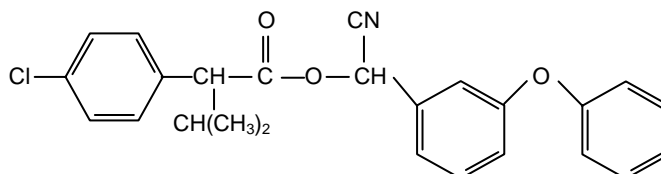
Introductory Details

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Date of preparation : 14 May 2004
Date revised : 4 October 2007

SECTION 1 : CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Details

Product Name : Fenvalerate 20% EC
Trade Name : SUMICIDIN 200
Chemical Name : (RS)-"-cyano-3-phenoxybenzyl (RS)-2-(4-chlorophenyl)-3-methylbutyrate
Chemical Formula : $C_{25}H_{22}ClNO_3$
Molar Mass : 419.9
Chemical Family : Synthetic pyrethroid
Manufacturer's Code : -
Use : Insecticide
Structural Formula :



Fenvalerate

1.2 Company Identification

Manufacturer

Name and Address : Agricultural Chemicals (M) Sdn. Bhd.
962, Lorong Perusahaan 8, Taman Perindustrian Perai,
13600 Perai, Pulau Pinang, Malaysia.
Telephone Number : 604-390 7988
Emergency Telephone Number : 604-390 7988

1.3 Contact Point

Designation : Ms. Cheong Wai Ching, Product Support Manager /
En. Ahmad Labib bin Yusof, Administrative Assistant
Tel. No. : 604-390 7988

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SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENT

Chemical Name	CAS No.	Proportion	Exposure Limit	Toxicity Data
(RS)-"-cyano-3-phenoxybenzyl (RS)-2-(4-chlorophenyl)-3- methylbutyrate	51630-58-1	20%	Refer to Section 9	Refer to Section 11
Surfactant	-	< 10%		
Solvent	-	Balance		

SECTION 3 : PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Yellowish liquid
Odour : Characteristic odour
Solubility : Miscible with water
Boiling Point (Technical) : Decomposition starts (about 249°C) before boiled
Melting Point (Technical) : 39.5-53.7 °C (pure)
Vapour Pressure (Technical) : 2.8×10^{-7} mmHg at 25°C
Percentage Volatiles : No data available
Evaporation Rate : No data available
Vapour Density : No data available
Specific Gravity : 0.92
Flash Point : 35°C
Autoignition temperature : No data available
Flammable Limit (%) : No data available

SECTION 4 : HAZARD IDENTIFICATION

Flammable
Harmful by inhalation, in contact with skin and if swallowed
Irritating to eyes, respiratory system and skin

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SECTION 5 : FIRST AID MEASURES

Ingestion : Induce vomiting after drinking water. Get prompt medical attention.
Eye contact : Flush with plenty of water.
Skin contact : Remove contaminated clothing and wash skin thoroughly with soap and water.
Inhalation : Remove patient to fresh air.
Notes to physician :
Poisoning symptoms : Vomiting may occur following ingestion. Central nervous system stimulation should be anticipated; symptoms may include nervousness and anxiety salivation, tremors and convulsions. Piloerection, fasciculation, ataxia, etc. (Based on the results from acute toxicity study in rats)
Medical treatment : If swallowed, perform gastric lavage with caution. Administer barbiturates in small doses. Ensure that respiratory, cardiovascular and renal functions are maintained.

SECTION 6 : FIRE FIGHTING MEASURES

Extinguishing Media : Dry powder, CO₂
Fire fighting instruction : Fire fighters should wear full-faced self-contained breathing apparatus and protective clothing.
Large fires : form, waterspray.
Special hazards : Toxic and corrosive products such as NO_x, HCl, HCN, CO

SECTION 7 : ACCIDENTAL RELEASE MEASURE

Leak and/or Spill :
Wear protective clothing. Eliminate ignition source. Ventilate area. Absorb spills with inert material such as clay, sand, earth, sawdust etc. and collect in a drum. Cover up the contaminated area with household detergent and small amount of water. Brush the slurry and spread inert absorbents on the slurry liquid and collect the absorbed material in a drum. Seal drum and dispose of. Do not contaminate water resources.

SECTION 8 : HANDLING AND STORAGE

Handling : Read the label before use. Wear protective clothing, pesticide respirator masks and protective gloves.

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Storage : Keep in original containers, tightly closed, in a cool, dry and well-ventilated place.
Do not store with animal feeds or foodstuff. Keep out of reach of children or farm animals.

SECTION 9 : EXPOSURE CONTROL AND PERSONAL PROTECTION (TECHNICAL)

- a. Exposure Limit : OEL (Based on Xylene): ACGIH :
TLV-TWA : 100 ppm 434 mg/m³ (1996)
- b. Engineering measures : Local exhaust ventilation
- c. Personal protection : Wear protective clothing, pesticide respiratory masks and protective gloves.

SECTION 10 : STABILITY AND REACTIVITY

Conditions to avoid : Direct sunlight, heat and extreme temperature

Incompatible : Alkaline material, oxidizing agents

Decomposition Products : Hydrochloric acid (HCl), nitrous gases (NO_x), hydrogen cyanide (HCN), carbon monoxide (CO)

Hazardous polymerization : No data available

Stability : Stable under normal conditions.

SECTION 11 : TOXICOLOGICAL INFORMATION (TECHNICAL)

Toxicity Data :

Acute Oral LD₅₀ : (Rat) 451 mg/kg

Acute Dermal LD₅₀ : (Rabbit) 2000 mg/kg

Inhalation LD₅₀ : (Rat) > 0.101 mg/L (3 hrs) (max. attainable conc.)

Eye Irritation : Non-irritating

Skin irritation : Non-irritating

Sensitization : Not sensitizing

Carcinogenicity : No data available.

Reproductive Effect : No data available.

Effects of overexposure : No data available.

Chronic effects : No data available.

Target organs : No data available.

Medical Conditions Generally Aggravated by exposure : No data available.

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SECTION 12 : ECOLOGICAL INFORMATION (TECHNICAL)

Mobility & Bioaccumulation : Fish studies indicate residues remain in 0-4 in. layer with half-life of 1-2 months. After 183 days, residues were at negligible or undetected levels. Confined and fields rotational crop data show residues likely to occur in root crops at intervals of < 9 months.

Biodegradability : No data available

Aquatic Toxicity : Very toxic to aquatic organism

LC₅₀ (96 h) : (Oncorhynchus mykiss) 0.22 µg/L

SECTION 13 : DISPOSAL INFORMATION

Dispose of according to local regulation.

SECTION 14 : TRANSPORT INFORMATION

Follow the precaution indicated in the storage and handling section. Follow all regulations in your country.

SECTION 15 : REGULATORY INFORMATION

Pesticides Act : Class III - Harmful

CPL Regulations : Class – Flammable, Harmful, Irritant

Risk Phrases : R10 Flammable
R20/21/22 Harmful by inhalation, in contact with skin and if swallowed
R36/37/38 Irritating to eyes, respiratory system and skin

Safety Phrases : S1/2 Keep out of reach of children
S13 Keep away from food, drink and animal feeding stuff
S16 Keep away from sources of ignition - No Smoking
S36/37/39 Wear suitable protective clothing, gloves and eyes/face protection

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SECTION 16 : OTHER INFORMATION

Reference : (a) Material Safety Data Sheet - Sumicidin Super
Date : 26-4-1999

(b) Material Safety Data Sheet - Sumicidin Technical
Date of preparation : 11th April 2002

(c) Material Safety Data Sheet -Sumicidin Technical
Sumitomo Chemical Company, Limited
First issue : Jan. 16, 2001 Version 1
MSDS No. : LATA04200Z10

(d) Guidelines for The Classification of Hazardous Chemicals, DOSH 1997

(e) Guidelines for The Formulation of A Chemical Safety Data Sheet, DOSH 1997

(f) Guidelines for Labelling of Hazardous Chemicals, DOSH 1997

To the best of our knowledge, the information contained herein is accurate. However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein.