

# MATERIAL SAFETY DATA SHEET

## Introductory Details

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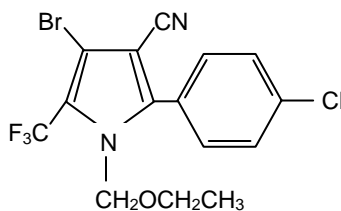
Date of preparation : 19 April 2003

Date revised : 3 June 2008

## SECTION 1 : CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### 1.1 Product Details

Product Name : Chlorphenapyr 10% SC  
Trade Name : KOTETSU  
Chemical Name : 4-Bromo-2-(4-chlorophenyl)-1-(ethoxymethyl)-5-(trifluoromethyl)-1H-pyrrole-3-carbonitrile  
Chemical Formula : C<sub>15</sub>H<sub>11</sub>BrClF<sub>3</sub>N<sub>2</sub>O  
Molar Mass : 409.6  
Chemical Family : Pyrrole compound  
Manufacturer's Code : -  
Use : Insecticide  
Structural Formula :



*Chlorfenapyr*

### 1.2 Company Identification

Manufacturer : Available upon request

#### **Importer/Distributor**

Name and Address : Agricultural Chemicals (M) Sdn. Bhd.  
962, Lorong Perusahaan 8, Taman Perindustrian Perai,  
13600 Perai, Pulau Pinang, MALAYSIA.  
Telephone Number : 604-3907988  
Emergency Telephone Number : 604-3907988

### 1.3 Contact Point

Designation : Ms. Cheong Wai Ching, Product Support Manager /  
En. Ahmad Labib bin Yusof, Administrative Assistant  
Tel. No. : 604-3907988

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## SECTION 2 : COMPOSITION/INFORMATION ON INGREDIENT

Chemical Name	CAS No.	Proportion	Exposure Limit	Toxicity Data
4-Bromo-2-(4-chlorophenyl) -1-(ethoxymethyl)-5-(trifluoro methyl)-1H-pyrrole-3-carbonitrile	122453-73-0	10 %	No data available	Refer to Section 11
Inert	-	Balance		

## SECTION 3 : PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Tan, free flowing liquid
Odour	: Typical odour of ketone
Solubility	: 0.12 mg/l in water (Technical)
Boiling Point	: No data available
Melting Point (°C)	: No data available
Vapour Pressure (mmHg at 25°C)	: No data available
Percentage Volatiles	: No data available
Evaporation Rate	: No data available
Vapour Density	: No data available
Specific Gravity	: 1.04 - 1.08 g/ml at 20°C
Flash Point	: Non flammable liquid
Autoignition Temperature	: No data available
Flammable Llimit (%)	: No data available
pH Value	: 7 - 9 / 1% in water
Viscosity	: 0.3 Pa at 20°C
Partition Coefficient log P <sub>o/w</sub>	: 4.83 (Technical)

## SECTION 4 : HAZARD IDENTIFICATION

Harmful by inhalation and if swallowed.

Irritating to eyes.

Very toxic to aquatic organisms.

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## **SECTION 5 : FIRST AID MEASURES**

- Ingestion : Give large quantity of water and induce vomiting. Do not induce vomiting or give anything by mouth to an unconscious patient. Get prompt medical attention.
- Eye Contact : Flush with plenty of water. Get medical attention if irritation occurs.
- Skin Contact : Wash skin with water and soap. Get medical attention if irritation occurs.
- Inhalation : Remove patient to fresh air. If breathing is weak, irregular or has stopped, open the airway, loosen his collar and belt and administer artificial respiration. Get prompt medical attention.
- Notes to Physician : Treatment is symptomatic.

## **SECTION 6 : FIRE FIGHTING MEASURES**

- Extinguishing Media : Water, dry foam, dry chemical or carbon dioxide. Use spray or fog-solid stream may cause spreading.
- Fire Fighting Instruction : Fire fighters should wear full-faced self-contained breathing apparatus and protective clothing.
- Special Hazards : Avoid breathing dust, vapors and fumes from burning materials.

## **SECTION 7 : ACCIDENTAL RELEASE MEASURE**

Leak and/or Spill :

Wear protective clothing. 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 : Wear protective clothing such as pesticide respiratory masks, goggles, gloves and apron. Handle and open container with care. Avoid contact with eye. Read the label before use.
- Storage : Keep in original container, tightly closed, out of reach of children. Avoid direct sunlight. Store in a dry and well ventilated place. Keep away from food, drink and animal feeding stuffs.

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## SECTION 9 : EXPOSURE CONTROL AND PERSONAL PROTECTION

Exposure Limit : No data available.  
Engineering Measures : Local exhaust ventilation.  
Personal Protection :  
Respiratory Protection : Pesticide respiratory masks  
Eye Protection : Goggles  
Skin Protection : Gloves and apron.

## SECTION 10 : STABILITY AND REACTIVITY

Stability : Stable  
Conditions to Avoid : Stable up to 60°C. Avoid storage under direct sunlight.  
Incompatibles : Strong oxidants.  
Decomposition Products : Potential decomposition products include HF, HBr, HCl and oxides of nitrogen and carbon.  
Hazardous Polymerization : Will not occur.

## SECTION 11 : TOXICOLOGICAL INFORMATION

Toxicity Data :  
Acute Oral LD<sub>50</sub> : (Rat) male 2,293 mg/kg  
female 2,333 mg/kg  
(Mouse) male 288 mg/kg  
female 492 mg/kg  
Acute Dermal LD<sub>50</sub> : (Rat) male > 2,000 mg/kg  
female > 2,000 mg/kg  
Inhalation : (Rat) male > 2.0 mg/l  
female > 2.0 mg/l  
Carcinogenicity : Negative (Technical)  
Mutagenicity : Negative (Technical)  
Reproductive Effect : Negative (Technical)  
Effects of Overexposure :  
Eye Irritation : (Rabbit) Slight irritant without dilution  
(Rabbit) Non-irritant with dilution  
Skin Irritation : (Rabbit) Non-irritation  
Sensitization : (Guinea pig) Negative

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Chronic Effects : No data available  
Target organs : No data available  
Medical Conditions Generally Aggravated by Exposure : No data available

## SECTION 12 : ECOLOGICAL INFORMATION

Mobility & Bioaccumulation : No data available.  
Biodegradability : Not readily biodegradable. Persistent in soil.  
Aquatic Toxicity : Very toxic to fish and aquatic invertebrates.  
Ecotoxicity : Very toxic to birds and insects.

## SECTION 13 : DISPOSAL INFORMATION

Dispose of waste in accordance with government or local regulations.

## 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 : Harmful  
Risk Phrases : R20/22 Harmful by inhalation and if swallowed  
R36 Irritating to eyes  
R50 Very toxic to aquatic organisms  
Safety Phrases : S23 Do not breathe vapour/spray  
S25 Avoid contact with eyes  
S56 Do not discharge into drains or the environment, dispose of to an authorised waste collection point

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## SECTION 16 : OTHER INFORMATION

Reference :

- a. MSDS - Kotetsu 10% SC, date : 5-7-2000
- b. MSDS - Kotetsu 10SC, date : 10 October 1996  
Mitsubishi Chemical
- c. Guidelines for The Classification of Hazardous Chemicals, DOSH 1997
- d. Guidelines for The Formulation of A Chemical Safety Data Sheet, DOSH 1997
- e. 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.