

MATERIAL SAFETY DATA SHEET

Introductory Details

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Date of preparation : 24 June 2004
Date revised : 11 June 2008

SECTION 1 : CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Details

Product Name : BICOMINE
Trade Name : BICOMINE
Chemical Name : (1) 5-nitroguaiacol sodium salt
(2) p-nitrophenol sodium salt
(3) o-nitrophenol sodium salt
Chemical Formula : (1) $C_7H_6NO_4Na$
(2) $C_6H_4NO_3Na$
(3) $C_6H_4NO_3Na$
Molar Mass : (1) 191.12
(2) 161.09
(3) 161.09
Chemical Family : Nitrogenous spice family
Manufacturer's Code : -
Use : Plant growth regulator

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 |
|---|---------|------------|--------------------|------------------|
| 5-nitroguaiacol sodium salt p-nitrophenol sodium salt o-nitrophenol sodium salt | - | 1.4 % | Refer to Section 9 | Refer Section 11 |
| Adjuvant | - | < 15 % | | |
| Water | - | Balance | | |

SECTION 3 : PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Reddish fluxional liquid
Odour : Characteristic odour
Solubility : Soluble in water
Boiling Point : 90°C
Melting Point : No data available
Vapour Pressure : No data available
Percentage Volatiles : No data available
Evaporation Rate : No data available
Vapour Density : No data available
Specific Gravity : 1.00
Flash Point : Not applicable
Autoignition Temperature : No data available
Flammable Limit (%) : It can be burnt at high temperature and under naked fire.
pH Value (without dilution) : 9.6

SECTION 4 : HAZARD IDENTIFICATION

Not classified as hazardous under CPL regulations.

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SECTION 5 : FIRST AID MEASURES

Ingestion : Induce vomiting after drinking water. Get medical attention as precaution.
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 : Treatment is symptomatic.

SECTION 6 : FIRE FIGHTING MEASURES

Extinguishing Media : Water, sand, foam, dry chemical powder, CO₂.
Fire fighting instruction : Fire fighters should wear full-faced self-contained breathing apparatus and protective clothing.
Special hazard : It is flammable at high temperature or expose to fire for long time.

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 : Wear protective gloves while handling. Read the label before use.
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 : No data available
b. Engineering measures : General ventilation
c. Personal protection : Wear protective gloves if necessary

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SECTION 10 : STABILITY AND REACTIVITY

Conditions to avoid : Direct sunlight, heat and extreme temperature
Incompatible : Potassium phosphate dibasic anhydrous and acids.
Decomposition Products : Reactivated with potassium phosphate dibasic anhydrous, wash away if in contact.
Hazardous polymerization : Reactivated with potassium phosphate dibasic anhydrous, decomposition products is insoluble phenolic compound.
Stability : Stable under normal conditions.

SECTION 11 : TOXICOLOGICAL INFORMATION (TECHNICAL)

Toxicity Data : Low toxicity
Acute Oral LD₅₀ : (Mouse) > 5,000 mg/kg
Acute Dermal LD₅₀ : (Mouse) > 6,000 mg/kg
Carcinogenicity : Test of Ames and micronucleus are negative
Reproductive Effect : Mouse sperm morphology test is negative
Effects of overexposure : No data available
Chronic effects : Cumulative toxicity coefficient > 12, affirmation of cumulative toxicity is very low in organs.
Target organs : Cell
Medical Conditions Generally Aggravated by exposure : No data available.

SECTION 12 : ECOLOGICAL INFORMATION

Mobility & Bioaccumulation : The active ingredient is expeditiously dissolved in water and infiltrated through skin into cell of the plant and animal.
Biodegradability : Medication of metabolic process inside the body of mouse is expelled
98% in 72 hours.
Aquatic Toxicity : It is hurtles and safe.

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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

CPL Regulations : Not classified as hazardous under CPL regulations.

SECTION 16 : OTHER INFORMATION

- Reference : (a) Chemical Safety Data Sheet - Feng Chan Su
Prepared by Beijing Lvbaio Bioengineering Technology Co., China
- (b) North Traffic University of China : Expertise report of capitulation of cargo convey about multiple nitrophenol sodium
- (c) Obviate Physic Science College of China : Disquisition report of cumulation and mutagenesis about multiple nitrophenol sodium
- (d) Material Safety Data Sheet - Bicomine
Date : 11-1-95
- (e) Guidelines for The Classification of Hazardous Chemicals, DOSH 1997
- (f) Guidelines for The Formulation of A Chemical Safety Data Sheet, DOSH 1997
- (g) 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.