MATERIAL SAFETY DATA SHEET

1 Manufacturer/information service:

Manufactory: Jiangsu Fengshan Group Co., Ltd.

Address: Caomiao Town, Dafeng City, Jiangsu Province, China.

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Product name: Chlorpyrifos 48%EC

2. Composition / Information On Ingredients

Composition	CAS No.	Content
Chlorpyrifos	2921-88-2	48%
Other ingredients		52%

3. Hazards Identification

Risk Phrase(s) R24/25 Toxic in contact with skin and if swallowed.

R65 Harmful: may cause lung damage if swallowed.

Safety Phrase(s) S28 After contact with skin, wash immediately with plenty of water

S36/37 Wear suitable protective clothing and gloves.

S45 In case of accident or if you feel unwell seek medical advice immediately

S62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.

4. First Aid Measures

Eyes: flush immediately with plenty of water for 15 minutes. Seek medical attention if irritation persists.

Skin: wash exposed skin and hair immediately with water, then with soap and water. If the patient feels unwell, seek medical advice.

Inhalation: remove to fresh air and keep warm; seek medical attention.

If swallowed: Keep patient at rest and seek medical advice. Obtain urgent medical advice. If breathing is difficult, give artificial respiration or oxygen. If advised by a doctor or Poisons Information Centre, atropine tablets may be administered - give one atropine tablet 0.6mg every 5 minutes until dryness of the mouth occurs. DO NOT attempt to give anything by mouth to a semi-conscious or unconscious person.

Antidote: Atropine sulphate, possibly in conjunction with toxogonin or obidoxime (PAM). Monitor respiratory, cardiac and central nervous system function. Monitor red blood cell and plasma cholinesterase levels. Administer oxygen if necessary. Watch for pulmonary oedema and

delayed neurological symptoms. Continued absorption of chlorpyrifos may occur and relapse may occur after initial improvement. VERY CLOSE SUPERVISION OF THE PATIENT IS INDICATED FOR AT LEAST 48 HOURS.

Contraindications: Adrenergic derivatives. DO NOT give morphine or tranquilisers

5. Fire-Fighting Measures

Extinguishing media: Water spray, foam, dry chemical, carbon dioxide

Hazard from combustion products: In a fire, formation of nitrogen and sulphur oxides, carbon monoxide, carbon dioxide, phosphorus pentoxide and dimethyl sulfide, can be expected.

6. Accidental Release Measures

Spills & Disposal Contain spill and absorb with clay, sand, soil or proprietary absorbent (such as vermiculite). Collect spilled material and waste in sealable open-top type containers for disposal. Dispose of at a landfill in accordance with local regulations.

Personal Protection For appropriate personal protective equipment (PPE), refer Section 8.

Clean-up Methods - Large Spillages Place damaged containers in recovery bins (if available) and return to manufacturer.

Environmental Precautions Prevent from entering drains, waterways or sewers.

7. Handling and Storage

Conditions for Safe Storage: Store in the closed, original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight.

Keep container tightly sealed and do not store with seed, fertilisers or foodstuffs.

Other Information Always read the label and any attached leaflet before use.

8. Exposure Controls / Personal Protection

Engineering Controls Use in a well ventilated area only and minimise contact.

Personal Protective Eyes: Safety goggles or face shield

Equipment Clothing: Cotton overalls buttoned to the neck and wrists.

Gloves: Elbow length chemical resistant PVC gloves Respiratory: Wear suitable respiratory equipment

9. Physical And Chemical Properties

Form Liquid

Appearance Straw coloured liquid.

Solubility in Water Forms an emulsion in water.

Specific Gravity 1.09 - 1.11

pH Value 4.0-8.0

10. Stability and Reactivity

Incompatible Materials

Avoid contact of the concentrate with strong alkalis and alkaline materials such as lime.

Avoid contact of the concentrate with strong acids.

Hazardous Reactions Keep away from strong oxidising agents, may react violently.

Hazardous Polymerization: Hazardous polymerisation is not possible.

11. Toxicological Information

Acute Toxicity - Oral

LD50: 345 mg/kg

Acute Toxicity -Dermal

LD50 (rat) >2000 mg/kg

Acute Toxicity -Inhalation

LC50 (rat) (4hr) > 0.2 mg/l

Skin Sensitisation

Product is not a skin sensitiser.

12. Ecological and Ecotoxicological Information

Acute Toxicity - Fish The following is data for the active ingredient, chlorpyrifos.

LC50 (96 hr) for bluegill sunfish is 0.002 - 0.010 mg/l.

LC50 (96 hr) for rainbow trout is 0.007 - 0.051 mg/l.

Very toxic to fish.

Acute Toxicity -Daphnia

LC50 (48hr) for chlorpyrifos is 0.0017 mg/l.

Acute Toxicity -Other Organisms:

Moderately toxic to birds.

LD50 for mallard ducks is 490 mg/kg

Bees: Toxic to bees. LD50 is 0.07 µg/bee.

13. Disposal Considerations

Do not use this container for any other purpose. Triple rinse containers, add rinsate to the spray tank, then offer the container for recycling/reconditioning, or puncture top, sides and bottom and dispose of in landfill in accordance with local regulations.

14. Transport Information

Not application

15. Regulatory Information

Not application

16.OtherInformation

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are presented in good faith and believed to be correct. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons on receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces formulations containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.