



# 江苏丰山集团有限公司

## JIANGSU FENGSHAN GROUP CO., LTD.

### MATERIAL SAFETY DATA SHEET

#### Section 1 – Chemical Product Identification

**Product name:** Chlorpyrifos 97%TC

**Supplier:** JIANGSU FENGSHAN GROUP CO., LTD.

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

**Tel:** +86-515-83374837

**Fax:** +86-515-83372403

#### Section 2 – Composition/Information on Ingredients

| Composition       | CAS No.   | Content % |
|-------------------|-----------|-----------|
| Chlorpyrifos      | 2921-88-2 | 97.0 min  |
| Other ingredients | Secret    | 3.0       |

#### Section 3 -Hazards Identification

**Risk Phrases:** Toxic in contact with skin and if swallowed.

**Safety Phrases:** When using, do not eat or drink. Wear suitable protective clothing. Keep locked up and out of reach of children. Wear suitable protective clothing and gloves.

#### Section 4 -First Aid Measures

**Inhalation:** No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice. See instructions above about treatment with atropine.

**Skin Contact:** No specific health data is available for this product. If any unusual symptoms become evident, or if in doubt, contact a Poisons Information Centre or a doctor. See instructions above about treatment with atropine.

**Eye Contact:** No effects expected. If irritation does occur, flush contaminated eye(s) with lukewarm, gently flowing water for 5 minutes or until the product is removed.

**Ingestion:** If swallowed, rinse mouth thoroughly with water and contact a Poisons Information Centre, or call a doctor at once. Give activated charcoal if instructed. See instructions above about treatment with atropine.

**Treatment:** Basic aid, decontamination, symptomatic treatment and administration of



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antidote.

**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.

### **Section 5 – Fire Fighting Measures**

**Fire and Explosion Hazards:** There is no risk of an explosion from this product under normal circumstances if it is involved in a fire. Violent steam generation or eruption may occur upon application of direct water stream on hot liquids. Fire decomposition products from this product may be toxic if inhaled. Take appropriate protective measures.

**Extinguishing Media:** Preferred extinguishing media are carbon dioxide, dry chemical, foam, water fog. Water fog or fine spray is the preferred medium for large fires.

**Fire Fighting:** When fighting fires involving significant quantities of this product, wear a splash suit complete with self contained breathing apparatus.

### **Section 6 – Accidental Release Measures**

Avoid contact with spilled material or contaminated surfaces. Do not smoke, eat or drink during the clean up process. Wear personal protective clothing and equipment as detailed in Section 8 PERSONAL PROTECTION. Keep people and animals away. Contain spill and absorb with earth, sand, clay or other absorbent material. Prevent spilled material from entering drains or watercourses. Collect and store in properly labelled drums for safe disposal. Clean floor with a damp cloth and place it in the drum. Seal drums and label ready for safe disposal. Deal with all spillages immediately. If contamination of drains, streams, watercourses etc is unavoidable warn the local water authority. Chlorpyrifos can be hydrolysed in water by adjusting the pH to alkaline.



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### Section 7 – Handling and Storage

**Handling:** Keep exposure to this product to a minimum, and minimise the quantities kept in work areas. The measures detailed below under "Storage" should be followed during handling in order to minimise risks to persons using the product in the workplace.

**Storage:** This product is a Scheduled Poison. Observe all relevant regulations regarding sale, transport and storage of this class of poison. Store in a cool, well ventilated area. Check containers periodically for leaks. Containers should be kept closed in order to minimise contamination.

### Section 8 – Exposure Controls and Personal Protection

**Ventilation:** No special ventilation requirements are normally necessary for this product. However make sure that the work environment remains clean and that dusts are minimised.

**Eye Protection:** Eye protection such as protective glasses or goggles is recommended when this product is being used.

**Skin Protection:** It is essential that all skin areas are adequately covered by impermeable gloves, overalls, haircovering, and apron and face shield.

**Protective Material Types:** We suggest that protective clothing be made from the following materials: rubber, PVC.

**Respirator:** If there is a significant chance that dusts are likely to build up in the area where this product is being used, we recommend that you use a suitable Dust Mask. Use a P3 mask, designed for use against all particulate including highly toxic materials. Otherwise, not normally necessary. Safety deluge showers should be provided near to where this product is being used.

### Section 9 – Physical and Chemical Properties:

**Physical:** Amber to white crystalline solid.

**Odour:** Mild mercaptan odour.

**Specific Gravity:** 1.398 at 43°C

**Water Solubility:** About 1.4mg/L at 25°C



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pH: 1 g/kg calculated as H<sub>2</sub>SO<sub>4</sub>

### Section 10 – Stability and Reactivity

**Reactivity:** This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf life properties.

**Conditions to Avoid:** This product should be kept in a cool place, preferably below 30°C. Containers should be kept dry.

**Incompatibilities:** strong acids, strong bases, strong oxidising agents.

**Polymerisation:** This product is unlikely to undergo polymerisation processes.

### Section 11 – Toxicological Information

**Toxicity:** The oral LD<sub>50</sub> for chlorpyrifos in rats is 95 to 270 mg/kg. The LD<sub>50</sub> for chlorpyrifos is 60 mg/kg in mice, 1000 mg/kg in rabbits, 32 mg/kg in chickens, 500 to 504 mg/kg in guinea pigs, and 800 mg/kg in sheep. The dermal LD<sub>50</sub> is greater than 2000 mg/kg in rats, and 1000 to 2000 mg/kg in rabbits. The 4-hour inhalation LC<sub>50</sub> for chlorpyrifos in rats is greater than 0.2 mg/L.

### Section 12 – Ecological Information

**Effects on birds:** Acute oral LD<sub>50</sub> for mallard ducks 490, house sparrows (*Passer domesticus*) 122, chickens 32-102 mg/kg. Dietary LC<sub>50</sub> (8 d) for mallard ducks 180, bobwhite quail 423 ppm

**Effects on aquatic organisms:** LC<sub>50</sub> (96 h) for bluegill sunfish 0.002-0.010, rainbow trout 0.007-0.051, roach 0.25, fathead minnows 0.12-0.54 mg/l.

**Effects on other organisms:** Aquatic and general agricultural uses of chlorpyrifos pose a serious hazard to wildlife and honeybees.

### Section 13 – Disposal Considerations

**Disposal:** Instructions concerning the disposal of this product and its containers are given on the product label. These should be carefully followed.

### Section 14 – Transport Information

Not applicable



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### **Section 15 – Regulatory Information**

Not applicable

### **Section 16 – Other Information**

The information contained in this Material Safety Data Sheet is provided in good faith and is believed to be correct at the date hereof. However, it is expected that individuals receiving the information will exercise their independent judgement in determining its appropriateness for a particular purpose. Fengshan group Ltd makes no representation as to the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability whatsoever, whether with respect to negligence or otherwise, for any loss or damage arising from or connection with the supply or use of the information in this Material Safety Data Sheet.