

MATERIAL SAFETY DATA SHEET

Section 1 – Chemical Product and Company Identification

Product name: Chlorpyrifos 95% TECH

Supplier: JIANGSU FENGSHAN GROUP CO., LTD.

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

Section 2 – Composition/Information on Ingredients

Composition	CAS No.	Content %
Chlorpyrifos	2921-88-2	95.0 min
Other ingredients		5.0

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 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 isinvolved 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 withself 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 beingused.

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 sincluding 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



pH: 1 g/kg calculated as H₂SO₄

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_{50} for chlorpyrifos in rats is 95 to 270 mg/kg. The LD_{50} 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_{50} is greater than 2000 mg/kg in rats, and 1000 to 2000 mg/kg in rabbits. The 4-hour inhalation LC_{50} for chlorpyrifos in rats is greater than 0.2 mg/L.

Section 12 – Ecological Information

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

Effects on aquatic organisms: LC₅₀ (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



Section 15 – Regulatory Information

Not applicable

Section 16 – Other Information

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