MATERIAL SAFETY DATA SHEET

1. Chemical Product Identification

Manufactory: Nanjing Fengshan Chemical Co., Ltd.

Address: 1904 Centre International Plaza, 105-6 North Zhongshan Road, Nanjing City, Jiangsu Province, China.

Tel: +86-515-83374837 **Fax**: +86-515-83372405

Product Name: Dimethoate 98%Tech.

2. Composition / Information on Ingredients

Composition	CAS No.	Content %
Dimethoate	60-51-5	98%
Other ingredients	——	2%.

3. Hazards Identification

Causes moderate eye irritation.

Avoid breathing product vapors or spray mist.

Avoid contact with eyes, skin or clothing.

4. First Aid Measures

IF INHALED: Remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.

IF ON SKIN: Wash with plenty of soap and water. Get medical attention.

IF SWALLOWED: Do not induce vomiting. Call a physician immediately.

IF IN EYES: Flush eyes with plenty of water for 15 minutes. Call a physician.

ANTIDOTE: Treat symptomatically based on judgment of the attending physician in response to reactions of the patient. Atropine only by injection is an antidote. Oximes such as 2-PAM/protopam may be therapeutic but should only be used in conjunction with atropine. You may want to contact your supplier or a doctor to ensure that this information is up to date.

5. Fire-Fighting Measures

FLASHPOINT (method): 266°F (closed cup)

FLAMMABLE LIMITS (LFL-UFL): 2% - 15%

FIRE AND EXPLOSION HAZARD: Slight fire hazard when exposed to heat or flame.

EXTINGUISHING MEDIA: Dry chemical, carbon dioxide, halon, water spray or standard foam.

FIREFIGHTING INSTRUCTIONS: Evacuate area and fight fire from a safe distance. Approach from upwind to avoid hazardous vapors and decomposition products. Fire exposed containers can build up pressure and should be kept cool with water spray if possible. Explosive vapor could form from ruptured containers. Foam fire extinguishing system is preferred to prevent environmental damage from excessive water run off. If water is used, avoid heavy hose streams. If possible, dike and collect water used to fight fire to prevent minimize run off.

6. Accidental Release Measures

SMALL SPILL: Absorb spill with inert material such as dry sand, vermiculite or fuller's earth, then place in a chemical waste container. Rinse area with dilute soda ash and place rinsate into chemical waste container.

LARGE SPILL: Same as for small spills; may neutralize with dilute alkaline solutions of soda and ash and place into chemical waste container. Do not allow material to run off into soil, drainage systems, or bodies of water. Notify and consult with proper regulatory authorities.

7. Handling and Storage

HANDLING: Use only in a well-ventilated area. Loosen closure cautiously before opening. Do not reuse this container. Empty containers retain product residue and can be dangerous.

STORAGE: **KEEP OUT OF REACH OF CHILDREN!** Store away from heat (77-88°F) and keep from freezing (<20°F). Keep away from food, feed and drinking water.

8. Personal Protection

EYE PROTECTION - Safety glasses.

CLOTHING - Long-sleeved shirt and long pants. Shoes plus socks.

GLOVES - Chemical-resistant such as barrier laminate or viton.

RESPIRATOR - When handled in an area where exposure limits may be exceeded, use a respirator with either an organic vapor removing cartridge with a prefilter approved for pesticides

9. Physical and Chemical Properties

PHYSICAL DESCRIPTION: Colorless crystal.

ODOR: Sulfurous

MOLECULAR WEIGHT: 229.3

MOLECULAR FORMULA: C5H12NO3PS2

BOILING POINT: 117oC/0.1 mmHg

MELTING POINT: 43-45 oC

DENSITY: 1.277 g/ml @ 65°C

10. Stability and Reactivity

CHEMICAL STABILITY: Relatively stable in aqueous media at pH 2-7. Hydrolysed in alkaline solutions; DT50 12 d (pH 9). Decomposes on heating, forming the O, S-dimethyl analogue.

CONDITIONS TO AVOID: Avoid temperatures above 100°F (60°C).

INCOMPATIBILITY WITH OTHER MATERIALS: Strong oxidizers, acids and alkalis.

HAZARDOUS POLYMERIZATION: Will not occur.

11. Toxicological Information

Acute Oral: LD50 for Rats: 387 mg/kg.

Acute Dermal: LD50 for Rats: > 2000 mg/kg

Inhalation: LC50 (4h) for Rats > 1.6 mg/l air.

Eye Irritation: Mild eye irritant (rabbits).

Skin Irritation: Non-irritating to skin (rabbits).

12. Ecological and Ecotoxicological Information

FISH TOXICITY: LC50 (96 h) for mosquito fish 40-60 mg/l

96 hour LC50, Rainbow trout – 6.2 mg/l

AVIAN TOXICITY: Acute oral LD50 for female mallard ducks 40 mg/kg.

Oral LD50, Bobwhite quail - 84 mg/Kg

BEE TOXICITY: Highly toxic. LD50 (oral and topical) 0.1-0.2 μg/bee.

13. Disposal Considerations

WASTE: Pesticide wastes are toxic and hazardous. Dispose of in accordance with applicable and local laws and regulations. Do not discharge or pour into soil, drainage system or bodies of water.

14. Transport Information

Not available

15. Regulatory Information

Not available

16. Other Information

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. This information applies to the product as such. 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 produce formulations containing this product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.