

Material Safety Data Sheet

DIMETHOATE 98% TC

1. Product Identification

Product Name: Dimethoate

CAS NO.: 60-51-5

Manufacturer's Name: Shanghai Tenglong Agrochem Co., Ltd.

Add: Yangpu building 24B, No.2005, Huangxing Road, Yangpu Shanghai

Phone Numbers: Tel: 86-21 5506 3225

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2. Hazard Classification

Hazardous. Dangerous goods.

Risk phrases: R20 Harmful by inhalation.

R22 Harmful if swallowed.

R24/25 Toxic in contact with skin and if swallowed.

R65 Harmful – may cause lung damage if swallowed.

Safety phrases: S20/21 When using do not eat or drink/smoke

S22 Do not breathe dust.

S23 Do not breathe spray.

S24/25 Avoid contact with skin/eyes

S29/35 Do not empty into drains/Dispose of material and container in a

safe way

SUSDP Classification: S6

ADG Classification: 6.1

UN Number: 3017 ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash-point not less than 23 °C

3. Composition

Substance	CAS Number	% content
Dimethoate	60-51-5	98

4. First Aid

If poisoning occurs, contact a Doctor or Poisons Information Centre.

If swallowed, induce vomiting, preferably using Ipecac Syrup APF, and give one atropine tablet every 5 minutes until dryness of mouth occurs-if poisoned by skin absorption or through lungs, every 5 minutes until dryness of mouth occurs – if poisoned by skin absorption or through lungs, remove any contaminated clothing,

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wash skin thoroughly and give atropine tablets as above. Get to a doctor or hospital quickly.

Eye: If this product comes into contact with eyes, hold eyes open and wash with running water for at least 15 minutes. Ensure irrigation under eyelids by occasionally lifting eyelids. Do not attempt to remove contact lenses unless trained. Transport to hospital or doctor immediately if eye irritation develops.

Skin: If this product comes into contact with skin, wash skin for at least 15 minutes with soap and water. Ensure contaminated.

Inhalation: If mists or combustion products are inhaled, remove to fresh air. Lay victim down & keep warm and rested. If breathing is shallow, or has stopped, ensure clear airway and apply keep warm and rested. If breathing is shallow, or has stopped, ensure clear airway and apply resuscitation or oxygen if available.

Eye wash stations or baths should be available where product is being used. Advice to doctor. Administration of atropine intravenously should be considered. This is an anticholinesterase compound.

5. Fire Fighting Measure

Suitable extinguishing media: Carbon dioxide, dry chemical, foam.

Unsuitable extinguishing media: Water stream, water fog.

Special hazards in fire: Product is flammable. Combustion may release carbon dioxide, nitrogen oxides, and/or phosphorous compounds.

Required special protective equipment for fire-fighters: Wear self contained breathing apparatus if in enclosed space.

Hazchem code: 3W

6. Accidental Release Measures

Emergency procedures: Wear protective equipment to prevent skin and eyes being affected. Breathing protection is advised if contact will be prolonged. EVACUATE UNPROTECTED AND UNNECESSARY PERSONNEL FROM AREA. If material is leaking from a container, stop the leak only if this can be done safely. Prevent spillage entering drains or watercourse.

Methods for containment & cleanup: Vermiculite, Sand, Soil is a suitable absorbent, especially soils high in clay. Soil can be used to form bunds to contain spillage. Contaminated soil should be collected for disposal at a suitable landfill. Contaminated area and tools should be washed down with hypochlorite bleach. Personal protective equipment and clothing should be washed with soapy water.

7. Handling And Storage

Handling: Keep away from food, drink, and animal feedstuff. KEEP OUT OF REACH OF CHILDREN. Wear suitable Personal protective equipment when handling and spraying.

Storage: Store in the original container in a dry, cool, ventilated, LOCKED area. DO NOT store in prolonged sunlight. DO NOT store with food, seed, or animal feedstuff.

8. Exposure Controls

National exposure standards: A time weighted average (TWA) has been established for Cyclohexanone, present in significant quantities in this product. This value is 100mg/m³. The corresponding STEL level is "not set". The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The exposure value at the TWA is the average airborne concentration of a particular substance when calculated over a normal 8-hour working day for a 5-day working week.

Biological limit values: The ADI for Dimethoate is set at 0.02mg/kg/day. The corresponding NOEL is set at 0.2 (H) mg/kg/day. Values taken from Australian ADI List, May 1995

Engineering measures: Use assisted ventilation in enclosed spaces if needed, especially storage areas.

Personal protection equipment:

Eye/face protection: Goggles or glasses to AS 1366, AS/NZS1337

Hand/skin protection: Overalls, PVC gloves and apron, face shield

Respiratory protection: Should not be necessary under normal conditions. If spray mist may be encountered, a particulate filter to AS/NZS 1715 should be worn.

9. Physical and Chemical Properties

Physical description: colorless crystal.

Odor: sulfurous

Molecular weight: 229.3

Molecular formula: C₅H₁₂NO₃PS₂

Boiling point: 117°C/0.1 mmHg

Melting point: 43-45 °C

Density: 1.277 g/ml @ 65°C

Vapor pressure: 0.25 mpa @ 25°C (technical)

Solubility: in water 23.3 (ph 5), 23.8 (ph 7), 25.0 (ph 9) (all in g/l, 20°C).

Readily soluble in most organic solvents, e.g. In alcohols, ketones, benzene, toluene, Chloroform, dichloromethane >300, carbon tetrachloride, saturated hydrocarbons, n-octanol >50 (all in g/kg, 20°C).

10. Stability and Reactivity

Chemical stability: Normally stable. Active may degrade in strong UV light.

Conditions to avoid: Very high or low temperatures.

Materials to avoid: Strong oxidising agents.

Hazardous decomposition products: Oxides of nitrogen and chlorine. Burning with limited oxygen may produce carbon monoxide.

Hazardous reactions: Not known. Does not polymerise.

11. Toxicological Information

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Acute toxicity:

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

LD50 for Mice: 160 mg/kg.

LD50 for Rabbits: 300 mg/kg

LD50 for Guinea pigs: 350 mg/kg.

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

LD50 for Guinea pigs: > 1000 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).

NOEL: (2y) for rats 5.0 mg/kg diet (0.2 mg/kg daily).

Medical conditions aggravated by exposure: pre-existing cholinesterase depression.

Carcinogen status:

Iarc - not listed

Mutagenic data: no evidence of mutagenic effects during *in vivo* and *in vitro* assays.

ADI: 0.002 mg/kg b.w

12. Ecological Information

- Effects on birds: this product is toxic to bird, especially high toxic to livestock.
- Effects on fish: Toxic to fish but disappears from water rapidly under field conditions at rate of recommendation.
- Effects on honeybees: refer to other organ phosphorus pesticides
- Effect on benefit insects: At the recommended doses and use in right technique, it showed almost no toxic on predators.

13. DISPOSAL CONSIDERATIONS

Product: Whenever possible, product should be used for its intended purpose, even if reclaimed from spillage (reclaimed product must be uncontaminated).

Containers: Whenever possible, follow directions given on container. If not available, triple or pressure rinse plastic or metal containers before disposal. Recycle containers if possible (replace cap and return clean containers to recycler or designated collection point). Treat rinsings as for product above. If not recycling, break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

Sewage: Do not dispose of product or rinsings into sewage systems or septic tanks

14. TRANSPORT INFORMATION

Not a dangerous good, so has no UN Number, UN proper shipping name, ADG Class, or ADG Packing Group.

UN Number:

UN proper shipping name:

ADG Class & subsidiary risks:

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ADG Packing Group:

Special precautions: Do not store with foodstuffs.

Hazchem code: None, but is a Combustible liquid Class C1 – flash point between 61 and 150 °C.

4Farmers does not anticipate that this product will be shipped by air or sea, nor be exported. Extra precautions may apply if such transport is undertaken.

15. REGULATORY INFORMATION

AICS: All of the significant ingredients in this formulation are to be found in the public AICS Database.

This product is an Agricultural Chemical registered by the Agricultural Pesticides and Veterinary Medicines Authority.

16. OTHER INFORMATION

This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact this company. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.