



MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

ZHEJIANG RAYFULL CHEMICALS CO.,LTD

ADD: NO.52 PUCHANG ROAD, PUZHOU INDUSTRIAL PARK, LONGWAN DISTRICT,
WENZHOU ZHEJIANG P.R. CHINA

Tel: +86-577-88905587

Fax: +86-577-88905567

Email: info@rayfull.com

sales@rayfull.com

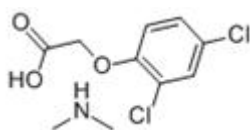
1. Chemical Product Identification

Product Name: 2,4-D Amine salt 96% TC

Molecular Formula: C₁₀H₁₃Cl₂NO₃

Molecular Weight: 266.12

Structural Formula:



Chemical Name: dimethylammonium (2,4-dichlorophenoxy)acetate

CAS No.: 2008-39-1

2. Composition / Information On Ingredients

Composition	CAS No.	Content %
2,4-D Amine salt	2008-39-1	96.0 min
Others ingredients	---	4.0 max

3. Hazards Identification

Harmful product if swallowed.

Risk of serious injury to eyes.

May cause sensitization by skin contact.

4. First Aid Measures

Skin contact: Immediately take off contaminated clothes. Clean those parts of the body



which have been in contact with the agent with large amounts of water with soap.

Eye contact: Flush the eyes with large amounts of water for at least 15 minutes. Medical consultation is necessary.

Inhalation: Provide access to fresh air. Provide medical help.

Ingestion: Do not give anything to drink. Induce vomiting. Provide medical help.

Indications for physician: The first action of a physician taking care over a poisoned person is assessing the appropriateness and effectiveness of first-aid. Further procedures depend on the status of the poisoned patient. There is no specific antidote. Completely treat symptomatic. Poisoned persons should remain under medical care for at least 48 hours.

5. Fire-Fighting Measures

Suitable extinguishing media: Fire foam and carbon dioxide and dry powder extinguishers, water (dispersed sprays).

Special exposure hazards: Barrels exposed to flames or high temperature effects must be cooled with dispersed water spray and removed from affected area if possible.

Special protective equipment for fire-fighters: The personnel directly participating in fire-fighting operations should wear proper, light clothes, protecting the skin (gas proof) and be provided with equipment isolating the airways because of the toxic burning products, such as hydrogen chloride, carbon monoxide and phosgene (carbonyl chloride).

6. Accidental Release Measures

Personal precautions: Do not inhale any vapours. Avoid any contact with the preparation.

Environmental precautions: Do not allow larger amounts of the product enter waste drainage lines, ground and surface waters or soil. In the case of environment contamination, notify appropriate authorities.

Methods for cleaning up: If possible, eliminate any leakage (e.g.: by sealing or placing a damaged container in an emergency container). Protect against liquid spread by embankment of contaminated area. Cover spilled liquid with absorptive material (e.g.: sand, soil) and remove to a closed container, then manage or neutralise, following effective regulations. Thoroughly flush the contaminated surface with water.

7. Handling and Storage

Handling: Follow the instructions given on the label-instruction enclosed to the container.



Prepare working solution of the preparation in volumes, necessary for immediate use only. Follow the generally accepted rules of industrial safety and hygiene. Protect against access of third persons.

Storage: Store in original, air-tight closed containers, in dry and well ventilated warehouse premises in temperatures from 0°C to 30°C, far from food products, animal foods, food containers, heaters and open flame sources. The storage area should be inaccessible for unauthorised persons, especially children. Protect against access of third persons.

8. Exposure Controls / Personal Protection

Protection of the respiratory tract: Wear a NIOSH-approved half face respirator equipped with an organic vapor/acid gas cartridge (specific for organic vapours, HCl, acid gas and SO₂) with a dust/mist filter.

Eyes and face protection: Tight goggles if direct contact is likely.

Hands protection: Rubber gloves

Skin protection: Protective clothes.

Hygiene measures: Do not let staining the clothes with the product. After work, wash face and hands thoroughly. Do not eat nor drink at work.

Other protective equipment: In normal conditions of the product application, no protective equipment of the respiratory tract is required. However, it is recommended at risk of product inhalation, e.g., when spraying. After use, decontaminate the equipment with sodium hypochlorite. Use standard protective clothes.

9. Physical And Chemical Properties

Appearance: White powder

Melting point: 140.5°C

Vapour pressure: 53Pa at 160°C

Solubility in water: 620mg/L under 25°C

Moisture: ≤1.5%

10. Stability And Reactivity

Stability: A stable product

Conditions to avoid temperatures: > 30°C, sunlight

Materials to avoid: Strong oxidative agents



Hazardous decomposition products: Carbon monoxide, HCl, nitric oxides

11. Toxicological Information

Acute oral LD50 for rats: 300-2000 a.i.mg/kg.

Acute dermal LD50 for rats: >2000 a.i.mg/kg.

Acute inhalation toxicity LC50 (4 h) for rats: >5.06 a.i.mg/L.

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

Eye irritation: Non-irritating to eyes (rabbits).

Skin sensitization for guinea pig: Not sensitising.

12. Ecological And Ecotoxicological Information

Effect on birds: Acute oral LD50 for Mallard is >5620 a.i.mg/kg.

Effect on fish: Acute LC50 (96 h) for Rainbow trout is 100 a.i.mg/l.

Effects on aquatic invertebrates: Acute EC50 (48 h) for Daphnia magna is >100 a.i.mg/l.

Effects on algae: Acute 72 hour EC50 for Pseudokirchneriella subcapitata is >60.7 a.i.mg/l.

13. Disposal Considerations

Product: Do not dispose into sewage system. Do not allow contamination of surface and ground waters. Do not store at landfills with neutral waste. While recycling or neutralising of waste product, follow effective regulations.

Container: Empty containers should be treated as dangerous waste. Further use of such a container is possible after its thorough, several-time washing in water or following an equivalent cleaning procedure. Immediate washing after emptying the container is recommended. Recycling or neutralisation of such a container should be performed according to effective regulations.

14. Transport Information

Not applicable

15. Regulatory Information

Not applicable

16. Other Information



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Tel: +86-577-88905587,88908857

Fax: +86-577-88905567

EMAIL: info@rayfull.com sales@rayfull.com

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.