

# Material Safety Data Sheet

## 2,4-D 720g/L SL

### 2,4-D Dimethylamine Salt 720 g/L SL

Revision Date: September 4, 2018

#### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

##### Product information

Usage: Herbicide, Plant growth regulator  
Company: ZHEJIANG XINAN CHEMICAL INDUSTRIAL GROUP CO., LTD.  
Telephone: 0086-571-87220466  
Telefax: 0086-571-87220464  
Responsible Department Material and Transport Safety Management: Not applicable.  
Emergency telephone number: Not applicable.

#### 2. COMPOSITION/INFORMATION ON INGREDIENTS

##### Chemical nature

2,4D Dimethylamine Salt 720 g/L SL

Chemical Name:	CAS-No.:	Concentration [g/L]
2,4-D dimethylamine salt	2008-39-1	720

Other ingredients (non-hazardous) Up to 1L

#### 3. HAZARDS IDENTIFICATION

##### Risk advice to man and the environment

Causes respiratory tract irritation. Harmful if swallowed. May be harmful if absorbed through the skin. Causes severe eye irritation. May cause allergic skin reaction. Target Organs: Central nervous system, respiratory system, eyes, skin.

##### Potential health effects

*Eye:* Causes severe eye irritation.

*Skin:* Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. May be harmful if absorbed through the skin.

*Ingestion:* Harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Human fatalities have been reported from acute poisoning.

*Inhalation:* Causes respiratory tract irritation. Can produce delayed pulmonary edema.

*Chronic:* May cause liver and kidney damage. May cause reproductive and fetal effects. Effects may be delayed. Chronic exposure will cause neurological degradation and/or abnormalities.

#### 4. FIRST AID MEASURES

**General advice: If poisoning occurs, immediately contact a doctor or Poisons Information Centre, and follow the advice given. Show this Material Safety Data Sheet to the doctor.**

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation

**Skin:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2–4 cupfuls of milk or water.

**Notes to physician:** Treat symptomatically and supportively.

#### 5. FIRE-FIGHTING MEASURES

**General information:** As in any fire, wear a self-contained breathing apparatus in pressure demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Combustible material; may burn but does not ignite readily.

**Extinguishing media:** Use water spray, dry chemical, carbon dioxide, or appropriate foam.

#### 6. ACCIDENTAL RELEASE MEASURES

**General information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

#### 7. HANDLING AND STORAGE

**Handling:** Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation. Wash clothing before reuse.

**Storage:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away

from incompatible substances.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Personal protective equipment:

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respiratory:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

**Engineering controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** Off-white to light yellow

**State:** Liquid

**Odor:** Amine odor

**pH:** 7.0-10.0

**Flash point:** Not flammable

**Explosive properties :** Not explosive

**Oxidizing properties :** Not oxidizing

**Specific density/Density:** 1.19 g/cm<sup>3</sup>

**Solubility in water:** Soluble

## 10. STABILITY AND REACTIVITY

**Chemical stability:** Stable at room temperature in closed containers under normal storage and handling conditions.

**Conditions to avoid:** Dust generation, excess heat.

**Incompatibilities with other materials:** Strong oxidizing agents.

**Hazardous decomposition products:** Hydrogen chloride, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

**Hazardous polymerization:** Has not been reported.

## 11. TOXICOLOGICAL INFORMATION

**Acute Oral, rat, LD<sub>50</sub>:** >300 mg/kg

**Acute Dermal, rat, LD<sub>50</sub>:** >2000 mg/kg

**Acute Inhalation:** >5 mg/L (4h)

<b>Dermal irritation:</b>	Non irritation
<b>Eye irritation:</b>	Serious eye damage/Irreversible effects on the eyes
<b>Skin sensitization:</b>	Non-sensitizing. (guinea pig)

## 12. ECOLOGICAL INFORMATION

### Environmental:

Terrestrial: Biodegradation is by far the most important loss process for 2,4-D in most soils, leading to various hydroxylic aromatic products.

Aquatic: Will tend to biodegrade with the rate especially dependent upon level of nutrients present, temperature, availability of oxygen, and whether or not the water has a prior history of contamination by 2,4-D or other phenoxyacetic acids. Typical half-lives of 10 to >50 days have been reported.

Atmospheric: The primary source of 2,4-D in air is spray applications of the herbicide or its mixture. Half life 1 day.

### Ecotoxicity effects

Fish: LC50 (96h) for rainbow trout is >100 mg/l

Bird: LD50 for Japanese quails is 1642.23 mg/l (95% CI is 1292.49-2524.91 mg/l)

## 13. DISPOSAL CONSIDERATIONS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

## 14. TRANSPORT INFORMATION

Not available.

## 15. REGULATION INFORMATION

Not available.

## 16. OTHER INFORMATION

This MSDS summarises 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.

**ZHEJIANG XINAN CHEMICAL INDUSTRIAL GROUP CO., LTD.**