

## MSDS

**2, 4-D Amine Salt 840 gms/lit. SL**  
(2,4-D DIMETHYL AMMONIUM 84 PCT. W/V S.L.)

## MATERIAL SAFETY DATA SHEET

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION:-

<b>Common Name</b>	2, 4-D Amine Salt 840 gm/liter
<b>Chemical Name</b>	2, 4-Dichlorophenoxyacetic acid, dimethylamine salt.
<b>Intended Use</b>	Herbicide
<b>Pesticide Family</b>	Phenoxy Herbicide
<b>Manufactured By</b>	<b>AMBEY LABORATORIES LTD.</b> <b>SP 1-5 RIICO Ind. Area. Sotanala</b> <b>Behror-301701Rajasthan (India)</b>

**CAS NO.** 2008-39-1

### 2. COMPOSITION/INFORMATION ON INGREDIENTS.

<b>Chemical Composition</b>	: 2,4-Dimethyl Amine Salt 840 gm/ltr., DM Water-160 gm/liter
<b>Hazardous component</b>	: 2,4-Dimethyl Amine Salt 840 gm/ltr.



### 3. HAZARDS IDENTIFICATION.

#### EFFECTS OF OVEREXPOSURE ACUTE (SHORT TERM EXPOSURE):

- EYE** : May cause severe irritation with corneal injury and  
May Result in permanent impairment of vision, even  
blindness.
- SKIN CONTENT** : Prolonged exposure may cause skin irritation.
- SKIN ABSORPTION** : A single prolonged exposure may result in the  
Materials being absorbed in harmful amounts.
- INGEASTION** : May cause gastrointestinal irritation.
- INHALATION** : Single exposure to vapors is not likely to be hazardous.
- ROUTES OF ENTRY** : Skin and eye contact, skin absorption, acute inhalation  
and ingestion.  
Noxious vapors under high temperature conditions.
- EFFECTS OF OVEREXPOSURE** : May cause loss of appetite, nausea, vomiting, general  
fenseness and muscular weakness, and prolonged or  
repeated exposure may lead to liver or kidney damage  
orchestral nervous system ymptoms.
- EXPOSURE LIMITS** : For 2,4-D Acid TLV – TWA 10mg/m<sup>3</sup> for Dimethyl  
amine 18mg/m<sup>3</sup>.
- IRRITANCY OF PRODUCT:**
- Eyes** : Marked irritation and corneal injury may occur.



**SENSITIZATION OF MATERIAL** : Pre-existing skin or respiratory disorders may be aggravated by excessive exposure to this material.

**CHRONIC  
(LONG TERM EXPOSURE)**

: Excessive exposure may cause liver, kidney, gastrointestinal and muscular effects, signs and Symptoms of excessive exposure may be nausea and/or vomiting and abdominal cramps and or diarrhea. Various animals cancer tests have shown no reliable positive association between 2,4-Dexposure and cancer. Epidemiology studies have been both positive and negative with the majority being negative. Birth defects are unlikely. Exposures having no effect on the mother should have no effect on the fetus. Did not cause birth defects in animals; other effects were seen in the fetus only at doses which caused toxic effects to the mother. High dietary levels of 2,4-D caused toxic effects (weight and viability reduction) in rats on a reproduction test. Has been shown to be negative in some vitro ("test tube") mutagenicity tests and positive in others. Results of mutagenicity tests in animals have been inconclusive.

**GENERAL REACTION**

: Always practice good industrial hygiene; handle with care; Avoid personal contact. Do not get into eyes or on skin; do not breathe mist or vapor of product. Do not swallow. Wash Hands with soap and water after each shift. Wash all work Clothing and completely clean all PPE (personal protective Equipment) after each shift.

**4. FIRST AID MEASURES**

: Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

**IF IN EYES**

: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact Lenses after the first 5 minutes, then continue rinsing eye. Call a poison Control Center or doctor for treatment advice.



**IF ON SKIN**

: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison Control Center or doctor for treatment advice.

**IF INHALLED**

: Move person to fresh air. If person is not breathing, call 911 or an ambulance then give artificial respiration, preferably mouth-to mouth if possible. Call a poison Control Center or doctor for further treatment advice.

**IF SWALLOWED**

: Call a poison Control Center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person. Contains petroleum distillate-vomiting may cause aspiration hazard.

**PHYSICIAN (ANTIDOTE)**

: Treat symptomatically and supportively.

**5. FIRE-FIGHTING MEASURES.**

FLAMMABILITY (Specify Conditions n/a)

FLASH POINT °C (method): n/a

**EXTINGUISHING MEDIA**

: Dry chemical, CO<sub>2</sub>, foam, water spray or fog. Special fire fighting procedures: Self contained breathing equipment. If water is used, use a soft fog to avoid spreading contamination. Use self-contained breathing apparatus and full protective gear in confined areas of building. Contain water to prevent entry into water supplies.

**HAZARDOUS COMBUSTION PRODUCTS** : Avoid noxious vapours under high temperature Conditions. Water based, may boil, and then burn.

**UNUSUAL FIRE & EXPLOSION HAZARDS** : Prevent water used in fire fighting from entering water supplies.



## 6. ACCIDENTAL RELEASE MEASURES:-

**PERSONAL PRECAUTION** : Use personal protective equipment.

**METHODS FOR CLEANING UP** : Do not touch spilled material. Stop leak if you can do it without risk. For small spills, take up with sand or other absorbent material and place into containers for later disposal. Move containers from spill area. For larger spills, dike far ahead of spill for later disposal. Keep unnecessary people away. Isolate hazards area and deny entry. Ventilate closed space.

**ENVIRONMENTAL PRECAUTIONS:** Prevent contamination of water.

## 7. HANDLING AND STORAGE:-

**HANDLING PRECAUTIONS** : Keep product in original tightly closed container; avoid exposure by inhalation; do not get on skin, eyes or clothing; do not eat, drink or smoke when handling; wash hands before eating, drinking or smoking.

**STORAGE** : Store in locked, well-ventilated storeroom, away from children and unauthorized personnel, and food and animal feed.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION.

**VENTILATION** : Provide local exhaust or general dilution ventilation

**RESPIRATORY PROTECTION** : Wear a suitable mask.

**HAND PROTECTION** : Wear rubber or plastic gloves.

**EYE PROTECTION** : Wear splash-proof or dust-resistant safety goggles.

**SKIN AND BODY PROTECTION:** Wear overalls and closed footwear.



**9. PHYSICAL AND CHEMICAL PROPERTIES :-**

<b>APPEARANCE &amp; ODOUR</b>	<b>: Reddish brown.</b>
<b>SPECIFIC GRAVITY</b>	<b>: 1.24-1.25@27°C</b>
<b>BOILING POINT °C</b>	<b>: &gt;100</b>
<b>FLASH POINT °C</b>	<b>: &gt;190</b>
<b>VAPOUR DENSITY (air=1)</b>	<b>: 0.021</b>
<b>FREEZING POINT °C</b>	<b>: 0</b>
<b>VAPOUR PRESSURE (mm)</b>	<b>: 20.7</b>
<b>pH</b>	<b>: 7.5-9.0</b>
<b>SOLUBILITY IN WATER</b>	<b>: Soluble</b>

**10. STABILITY AND REACTIVITY:-**

**Stability (Conditions to avoid)** : Stable (excessive heat).

**Reactivity & under what condition** : n/e

**Incompatibility (materials to avoid)** : Strong Oxidizers, acids.

**Hazardous Decomposition Products** : ammonia, oxides of nitrogen, chlorine Containing compound and other Unknown hazardous material may be Formed in a fire situation. Incomplete combustion may lead to formation of carbon monoxide and/or other asphyxiants.



## 11. TOXICOLOGICAL INFORMATION:-

<b>ORAL LD50 (Rat)</b>	: 699mg/kg
<b>DERMAL LD50 (Rabbit)</b>	: >2000mg/kg
<b>INHALATION LC50 (Rat) (4hrs)</b>	: 1.79mg/kg
<b>EFFECTS TO EYE</b>	: The concentrate will cause irritation.
<b>EFFECTS TO SKIN</b>	: Prolonged contacts with the concentrate with skin will results in absorption of some 2,4-D Which can be harmful.

**SKIN SENSITISATION GUIENEA PIGS:** Non skin sensitizer, may cause irritation under prolonged contacts.

## 12. ECOLOGICAL INFORMATION :

<b>LC50 (96h) rainbow trout</b>	: 100 $\mu$ g/l
<b>Acute LD50 Oral mallard ducks</b>	: >1000mg/kg
<b>Bee toxicity</b>	: LD50 (24h, oral) 104 $\mu$ g/bee
<b>Chicken LD50 oral toxicity</b>	: >2000mg/kg
<b>Aquatic invertebrates</b>	: Daphnia magna LC50 (48h) 184 $\mu$ g/l

## 13. DISPOSAL CONSIDERATIONS :

<b>Pesticide disposal facility</b>	: Dispose of waste at an approved disposal.
<b>Container Disposal</b>	: Completely empty container into application equipment. This dispose of empty container in a sanitary landfill or, incineration of if allowed by state & local authorities, by burning, If burned, stay out of smoke.



**14. TRANSPORT INFORMATION** : Not regulated for ground or rail transport.  
Regulated for marine transport only.

**UN NO.** : UN 3082  
**Class** : 9  
**Packing group** : III.  
**Proper shipping name** : ENVIRONMENTALLY  
HAZARDOUS SUBSTANCE LIQUID, N.O.S.  
**Environmental risk** : IMDG Marine pollutant.

**15. REGULATORY INFORMATION:-**

**Hazard symbol** : The harmful symbol (XN). The dangerous for the environment symbol (N)  
**Risk Phrases** : R20/21/22 – Harmful if swallowed.  
**Safety Phrases** : S2/13 – Keep out of reach of children, Away from food, drink and animal feeding stuffs.

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