

## MATERIAL SAFETY DATA SHEET

### 1. Product and Company Identification

|                          |   |   |
|--------------------------|---|---|
| <b>Product Name</b>      | : | 2, 4-D Amine Salt 72% SL  |
| <b>Chemical Name</b>     | : | (2,4-dichlorophenoxy)acetic acid  |
| <b>Type</b>              | : | Herbicide   |
| <b>Molecular formula</b> | : | C <sub>8</sub> H <sub>6</sub> Cl <sub>2</sub> NO <sub>3</sub>                           |
| <b>Manufacturer</b>      | : | Agrow Allied Ventures Pvt. Ltd.<br>701-704, Enkay Tower, Udyog vihar V, Gurugram 122016 |
| <b>Emergency Contact</b> | : | +91 124 4600414 / 15 / 1 6  |
| <b>Website</b>           | : | www.agrowallied.in  |

### 2. Composition/Information on ingredients

#### GHS Classification:

Physical

#### **Human Health**

Acute toxicity ingestion, Category 4  
Acute toxicity dermal, Category 4  
Acute toxicity inhalation, Category 4  
Serious eye damage / eye irritation, Category 1  
Skin sensitization, Category 1



#### **Environmental hazard**

Danger to the aquatic environment (long-term danger), Category 3  
Danger to the aquatic environment (long-term danger), Category 4

#### **Label elements SGA**

Warning phrases            H302: Harmful if swallowed  
   H312: Harmful in contact with skin  
   H332: Harmful if inhaled

Hazard indication            H318: Causes serious eye damage  
                                       H317: May cause an allergic skin reaction  
                                       H411: Toxic to aquatic life with long-lasting effects  
                                       H412: Harmful to aquatic life with long-lasting effects

Precautionary Statement P101: If medical advice is needed, have product container or label at hand.  
                                       P102: Keep out of reach of children.

| Chemical Name     | CAS#      | Percent or content (w/v) |
|-------------------|-----------|--------------------------|
| 2, 4 D            | 2008-39-1 | 72.00 %                  |
| Other ingredients | -         | QC                       |

### 3. Health Hazards Identification

**Symptoms of Human Poisoning:** Exposure may cause nausea, vomiting, dizziness, temporary loss of vision, abdominal pain, diarrhoea, headache, hypotension, confusion, aggression, bizarre behaviour, muscle twitching, muscle weakness, loss of muscle coordination, muscle stiffness, loss of tendon reflexes, coughing or burning sensations in the upper respiratory tract and chest. Some of these symptoms may persist for a length of time or even be permanent.

**Inhalation:** Exposure through inhalation is unlikely.

**Skin Contact:** Not irritating, non-sensitizer.

**Eye Contact:** Irritating to eyes.

**Environmental Risks:** Toxic to fish and aquatic invertebrates (active ingredient).

**Other Risks:** Avoid contaminating any body of water.

### 4. First Aid Measures

**Eye contact:** Flush eyes with plenty of clean water, occasionally lifting upper and lower eye lids, for at least 15 minutes. Check for, and remove if present, any contact lenses after the first 5 minutes of flushing. Get medical attention.

**Skin contact:** Remove all contaminated clothing and leather items. Wash the skin thoroughly with soap and rinse the skin with large quantities of clean water. Wash any contaminated clothing before reuse.

**Inhalation:** Remove patient to fresh air. Get medical attention should any symptoms develop or persist.

**Ingestion:** If swallowed, immediately give a large amount of water to drink. Rinse the mouth with clean water.

If vomiting occurs, administer more water. Never give anything by mouth to an unconscious person. Get medical attention.

**Advice to physician:** Treat symptomatically and supportively. If large quantities have been ingested, gastric lavage may be considered as well the administering of activated charcoal.

**Antidote:** There is no specific antidote.

## 5. Fire Fighting Measures

**Extinguishing Media:** Use dry chemical, carbon dioxide (CO<sub>2</sub>), water spray or alcohol-resistant foam. Avoid high pressure water spray. Contain fire-fighting water and prevent contamination of any natural water course or water body, as well as entry of this water into sewers or drains.

**Fire and Explosion Hazards:** Isolate the fire area. The product may burn if exposed to heat or flame. The packaging and surrounding goods (if any) in the immediate area must be considered.

**Hazardous Products of Combustion:** The products of combustion (burning of the product and/or packaging) in the event of a fire are expected to be toxic and to cause irritation of the respiratory tract or eyes. Inhalation of this smoke (or fumes, gases or vapours) can be harmful. Avoid inhalation. Thermal decomposition of the product and surrounding goods, packaging, etc., may release toxic fumes and other harmful compounds.

**Fire Fighting Equipment:** Wear full protective clothing and a self-contained breathing apparatus.

**Fire Fighting:** Remove spectators from the area. Keep up-wind of the fire. Avoid inhalation of vapours and fumes from burning material. Fight the fire from maximum distance. Remove containers from the fire area if possible and only if this can be done without personal risk. Water can be used to keep intact (not burning) cool and thus help prevent the containers from exploding due to the heat.

## 6. Accidental Release Measures

**Personal Precautions and Protective Equipment:** Avoid contact with the skin and eyes. Do not breathe fumes. Wear personal protective clothing (overall, boots, gloves). Keep personnel and spectators up-wind of the spillage.

**Emergency Procedures:** Isolate the spillage area. Keep unprotected persons and animals out of the area. Dyke in order to confine the spillage and prevent contamination of any natural water course or water body, as well as entry of the product into sewers or drains.

**Environmental Precautions:** Keep the spillage out of waterways, drains, streams, rivers and dams. Methods and Materials for Cleaning up: Absorb with a non-combustible absorbent material such as clay, sand or soil. Vacuum, shovel or pump waste into a drum and label the drum for disposal of the contents.

## 7. Handling and Storage

**Handling:** Avoid contact with eyes and skin. Remove contaminated clothing and wash thoroughly before reuse. Do not eat, drink or smoke while handling this product. Wash hands and exposed skin thoroughly after handling or contact with this product and before eating, drinking and smoking. Do not contaminate drains, sewers and water bodies when disposing of equipment rinse water. Observe all safeguards on the label as to cleaning and destruction of the container.

**Storage:** Store in a cool dry well-ventilated place protected from sunlight, moisture and rain. Store away from any heat source and ignition point. Keep out of reach of children, uninformed persons and animals. Store away from other pesticides, food, drink, seed and animal feed. Store only in the original labelled container.

## 8. Exposure Controls/Personal Protection

### Personal Protective Clothing

To reduce personnel exposure to this product, it is recommended to use appropriate personal protective clothing when handling this product. Do not wear leather clothing.

**Respiratory Protection:** For periods of prolonged exposure, wear a face mask or respirator.

**Hand Protection:** Wear chemical resistant gloves when handling the concentrate.

**Eye Protection:** Wear a face shield when handling the concentrate.

**Skin and Body Protection:** Wear a long sleeved overall and boots.

### Engineering Controls:

Ensure thorough ventilation when handling the concentrate.

### Hygiene Measures:

Do not eat, drink, smoke or go to the bathroom while handling this product.

Wash face, hands and exposed skin after handling this product.

Wash contaminated clothing after exposure to this product.

## 9. Physical and Chemical Properties

**Appearance:** Liquid (Amber)

**Odor:** Slight phenolic odor

**Flammability:** Not auto flammable below 400°C.

**pH:** 7.0-9.0

**Density:** 1.24 g/ml

**Explosive:** Non explosive

## 10. Stability and Reactivity

**Stability:** Product has a shelf life of 2 years provided it is stored in the unopened, original and undamaged container, and it is not exposed to temperature extremes or direct sunlight.

**Hazardous Decomposition:** Unlikely to occur.

**Conditions to Avoid:** Heat and ignition sources.

### 11. Toxicological Information

**Acute Oral Toxicity:** Rat, LD50: >1684.22 mg/kg body weight

**Acute Dermal Toxicity:** Rat, LD50: >5000 mg/kg body weight

**Inhalation Toxicity:** >6.2 mg/L (4hr)

**Skin Irritation/Corrosion:** Rabbit, Moderate irritating

**Eye Irritation/Damage:** Rabbit, not irritating

**Skin Sensitization:** Guinea Pig, non-sensitizer

### 12. Ecological Information

#### Aquatic Toxicity, Fish

Tilapia 702 mg/ℓ , Labeo Rohita 386 mg/ℓ

#### Aquatic Toxicity, Invertebrates

Water Flea (*Daphnia magna*); 21 days, LC50 301 mg/ℓ

#### Arthropod Toxicity

Honeybee (*Apis mellifera* L.) LD50 >100 µg product/bee

#### Avian Toxicity

Acute oral LD50, chicken 136mg/ kg bw, Pigeon 540.86 mg/Kg bw

### 13. Disposal Consideration

**Product:** Recycle if appropriate equipment and/or facilities are available.

Do not burn.

Dispose of as hazardous industrial waste.

Keep out of drains, sewers, ditches and water ways.

**Containers:** Invert the empty container over the spray or mixing tank and allow draining for at least 30 seconds after the flow has slowed down to a drip. Thereafter rinse the container three times with a volume of water equal to a minimum of 10 % of that of the container. Add the rinsing to the contents of the spray tank before destroying the container in the prescribed manner.

Do not reuse the empty container for any other purpose and destroy it by perforation and flattening. Pour rinse water into spray tank; spray on target area.

Store for collection by approved waste or recycling disposal service.

#### 14. Transport Information

Product Name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE  
LIQUID N.O.S. (2,4-D formulated)

UN No. : 3082

UN Hazard Class : 9

UN Packing Group : III

Marine Pollutant status : YES

EMS : F-A, S-F

#### 15. Regulatory Information

Risk phrases:

R22 Harmful if swallowed.

R 36/37/38 Irritating to eyes, respiratory system and skin

R54 Toxic to flora.

Safety phrases:

S1/2 Keep locked up and out of reach of children.

S20/21 When using do not eat, drink or smoke.

S23 Do not breathe vapour or spray.

S24/25 Avoid contact with skin and eyes.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S 61 Avoid release to the environment.

#### **16. Other Information**

The information presented is not necessarily exhaustive but is regarded as representative. These data are presented in good faith and are believed to be correct. No representation as to the completeness or accuracy of these data is made. No responsibility for damages of any nature whatsoever resulting from the use of or reliance upon this information will be accepted. In the event of any uncertainty, consult the supplier before use.

PREPARED BY: AAVPL, Safety Division

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