1. Identification

1.1 GHS Product Identifier: Cornbelt® 4lb. Amine

1.2 Alternate Name(s): Dimethylamine salt of 2,4-Dichlorophenoxyacetic acid

1.3 Chemical Class: Herdicide

1.4 Active Ingredient: Dimethylamine salt of 2,4-Dichlorophenoxyacetic acid

1.5 Recommended Use/Restrictions: Please see the label for specific recommendations regarding this product.

1.6 Supplier’s Details: Van Diest Supply Company
1434 220th St.
Post Office Box 610
Webster City, Iowa 50595

1.7 Emergency Phone Number: FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT CALL CHEMTREC – DAY OR NIGHT 1-800-424-9300

2. Hazards Identification

2.1 Appearance: Clear, light amber liquid with a pungent odor.

2.2 Health Hazards: Serious eye damage/eye irritation Category 1
Skin corrosion/irritation Category 2

2.3 Physical Hazards: May release toxic fumes if burned

2.4 Environmental Hazards: May be toxic to fish, aquatic invertebrates and non-target plants.
Use of this chemical in areas where soils are permeable, and the water table is shallow, may result in groundwater contamination.

2.5 Label Elements:

Danger

Hazard:
H318 Causes irreversible eye damage if not treated promptly.
H315 Causes skin irritation.

Prevention:
P262 Do not get in eyes, on skin, or on clothing.

Disposal:
P501 Dispose of contents and container in accordance with federal, state, and local regulations.
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Material</th>
<th>Common Name/Synonyms</th>
<th>CAS #</th>
<th>% in Formulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethylamine salt of 2,4-Dichlorophenoxyacetic acid</td>
<td>2,4-D Amine</td>
<td>2008-39-1</td>
<td>16.8%</td>
</tr>
<tr>
<td>Inert Ingredients</td>
<td>NA</td>
<td>NA</td>
<td>53.2%</td>
</tr>
</tbody>
</table>

This Safety Data Sheet is not a guarantee of product specification. Specific ingredient content may be found on the product label.

4. FIRST AID MEASURES

<table>
<thead>
<tr>
<th>4.1 General First Aid Recommendations are as follows:</th>
<th>Eye Contact:</th>
<th>Immediately hold eye open and rinse slowly and gently with clean water. Remove contact lenses after 5 minutes, if present, then continue rinsing eye for 15 minutes more. Seek medical advice.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Skin Contact:</td>
<td>Remove contaminated clothing and clean skin thoroughly with soap and water for 15 – 20 minutes. Wash contaminated clothing before reuse. Seek medical advice.</td>
</tr>
<tr>
<td></td>
<td>Ingestion:</td>
<td>Call a poison control center, physician, or hospital immediately for treatment advice as appropriate. Identify the name of the product, the type and amount of exposure, and symptoms the patient is experiencing. 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, physician, or hospital. Do not give anything by mouth to an unconscious person.</td>
</tr>
<tr>
<td></td>
<td>Inhalation:</td>
<td>Remove to fresh air. If person is not breathing, call 911 or an ambulance, and then give artificial respiration if possible, preferably mouth-to-mouth if possible.</td>
</tr>
</tbody>
</table>

4.2 Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

4.3 Most Important Symptoms/Effects (acute and delayed): Overexposure by contact may cause severe irritation to skin and eyes.

4.4 Indication of Need for Immediate Medical Attention: If poisoning is suspected, or any symptoms are serious, immediately contact the poison control center, physician, or nearest hospital for instructions. Have the container or label with you when calling or going for treatment. Inform the contact of the name of the product, the type and amount of exposure, and symptoms the patient is experiencing.

5. FIREFIGHTING MEASURES

| 5.1 Suitable Extinguishing Media: | Flashpoint is >212°F. Use water spray or foam. |
| 5.2 Specific Hazards Arising from the Chemical: | Hydrogen chloride and oxides of nitrogen from thermal decomposition. |
| 5.3 Special Protective Equipment: | Self-contained breathing apparatus with full facepiece and protective clothing. |
| 5.4 Precautions for Firefighters: | Evacuate nonessential personnel from area and fight fire upwind from a safe distance to avoid possible hazardous fumes and decomposition products. Dike and collect water runoff. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff. |
6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment, and Emergency Procedures:

Using appropriate personal protective equipment specified in Section 8 – Exposure Control/Personal Protective Equipment, absorb any spilled material and place in a container for disposal. Isolate hazard area. Keep unnecessary and unprotected personnel from entering.

6.2 Methods and Material for Containment and Cleanup:

Small spill: Absorb small spills on sand, vermiculite or other inert absorbent. Place contaminated material in appropriate container for disposal. Large spill: Dike large spills using absorbent or impervious material such as clay or sand. Recover and contain as much free liquid as possible for reuse. Allow absorbed material to solidify, and scrape up for disposal.

Do not allow wash waters from clean up to enter waterways.

7. HANDLING AND STORAGE

7.1 Conditions for Safe Handling: KEEP OUT OF REACH OF CHILDREN! Follow personal protective equipment recommendations as shown in Section 8 – Exposure Control/Personal Protection when handling this material, adjusted for specific handling methods and conditions, to prevent contact with this material. Use only in a well-ventilated area. Do not reuse container. Follow label instructions carefully.

7.2 Conditions for Safe Storage: Do not store this product near fertilizers, seeds, insecticides, or fungicides. Reclose all partially used containers by thoroughly tightening screw cap. Absorb spills with a suitable clay absorbent & dispose of as indicated under “Pesticide Disposal.” Protect from freezing. If stored below freezing, the product must be warmed to at least 70°F and agitated before using. This does not affect the efficiency of the product. Refer to product label for additional and complete storage guidance.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Occupational Exposure Limits:

<table>
<thead>
<tr>
<th>Material</th>
<th>CAS #</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethylamine salt of 2,4-Dichlorophenoxyacetic acid</td>
<td>52008-39-1</td>
<td>10 mg/m³</td>
<td>10 mg/m³</td>
<td>No</td>
</tr>
</tbody>
</table>

8.2 Engineering Controls:
Proper ventilation is required when handling or using this product to keep exposure to airborne contaminants below the exposure limit. Local mechanical exhaust ventilation may be required. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

8.3 Personal Protective Equipment: The following recommendations are suitable for small, incidental contact with this material. Recommendations for commercial or on-farm application of this chemical may be found on the container label.
8. EXPOSURE CONTROL/PERSONAL PROTECTION, continued

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Contact:</td>
<td>If splashing can be reasonably anticipated, for instance while pouring the product into another container, wear chemical splash goggles.</td>
</tr>
<tr>
<td>Skin Contact:</td>
<td>Where skin contact is possible wear a suitable barrier such as chemical resistant gloves and chemical apron. Preferred glove materials include: butyl rubber, nitrile, latex, and neoprene. Wash gloves before removing. Wash thoroughly and put on clean clothes immediately after handing this product. Keep clothing separate from other laundry. Discard heavily contaminated clothing.</td>
</tr>
<tr>
<td>Ingestion:</td>
<td>Do not allow eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to this material. Wash hands thoroughly before engaging in these activities.</td>
</tr>
<tr>
<td>Inhalation:</td>
<td>A respirator is not normally needed for the incidental handling of this product. For spills or other situations that may generate elevated levels of vapor or dust use a suitable NIOSH certified respirator.</td>
</tr>
</tbody>
</table>

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear, light amber liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Pungent odor</td>
</tr>
<tr>
<td>Odor Threshold:</td>
<td>ND</td>
</tr>
<tr>
<td>pH</td>
<td>7.0 – 8.0</td>
</tr>
<tr>
<td>Melting Point:</td>
<td>NA</td>
</tr>
<tr>
<td>Boiling Point:</td>
<td>ND</td>
</tr>
<tr>
<td>Flash Point:</td>
<td>&gt;212°F</td>
</tr>
<tr>
<td>Evaporation Rate:</td>
<td>ND</td>
</tr>
<tr>
<td>Flammability:</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Upper/Lower Explosive Limit:</td>
<td>NA</td>
</tr>
<tr>
<td>Vapor Pressure:</td>
<td>16.5 mm Hg at 68°F</td>
</tr>
<tr>
<td>Vapor Density:</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Relative Density:</td>
<td>9.40 – 9.95 lbs/gal (approx.)</td>
</tr>
<tr>
<td>Partition Coefficient (n-Octanol/Water):</td>
<td>( \log P_{\text{ow}} &lt;3.2 ) @ 25 C</td>
</tr>
<tr>
<td>Auto-Ignition Temperature:</td>
<td>ND</td>
</tr>
<tr>
<td>Decomposition Temperature:</td>
<td>ND</td>
</tr>
<tr>
<td>Viscosity:</td>
<td>9.925 cSt @ 68°F</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

10.1 Reactivity: Non-reactive under normal conditions.
10.2 Chemical Stability: Stable under normal conditions.
10.3 Possibility of Hazardous Reactions: Will not occur.
10.4 Conditions to Avoid: Avoid excessive heat.
10.5 Incompatible Materials: Oxidizing agents and acids.
10.6 Hazardous Decomposition Products: Thermal decomposition will produce HCl (hydrochloric acid), oxides of carbon and irritating/toxic fumes.

11. TOXICOLOGICAL INFORMATION

11.1 Likely Routes of Exposure: Overexposure may occur by inhalation, ingestion, and absorption.
11.2 Skin Corrosion/Irritation: Moderately irritating to skin.
11.3 Serious Eye Damage/Irritation: This material is anticipated to be corrosive to the eyes.
11.4 Respiratory or Skin Sensitization: This material is a contact sensitizer.
11.5 Germ Cell Mutagenicity: Weight of evidence indicates that 2,4-D acid is not mutagenic.
11. TOXICOLOGICAL INFORMATION, continued

11.6 Carcinogenicity: Refer to table below.

<table>
<thead>
<tr>
<th>Material</th>
<th>Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethylamine salt of 2,4-Dichlorophenoxyacetic acid</td>
<td>NTP: No, IARC: 2B, OSHA: No</td>
</tr>
</tbody>
</table>

11.7 Reproductive Toxicity: Laboratory tests have shown decreased fetal body weights at doses toxic to mother animals.

11.8 STOT-Single Exposure: Overexposure by vapor inhalation is unlikely under normal handling conditions.

11.9 STOT-Long Term Exposure: This material is not linked to long-term exposure effects.

11.10 Aspiration Hazard: This product does not meet the definition of an aspiration hazard.

11.11 Acute Toxicology:
- Ingestion: Oral LD$_{50}$ >1,000 mg/kg
- Skin Contact: Dermal LD$_{50}$ >5,000 mg/kg
- Inhalation: Inhalation LC$_{50}$ (dust/mist) 2.08 mg/L

12. ECOLOGICAL INFORMATION

12.1 Environmental Summary: This pesticide may be toxic to fish and aquatic invertebrates. For terrestrial uses: do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash waters or rinsate. Apply this product only as directed on label.

This chemical has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. Application around a cistern or well may result in contamination of drinking water or groundwater.

12.2 Fate: 2,4-D DMA salt rapidly disassociates to the parent acid in the environment. Typical half-life of the 2,4-D acid is from a few days to a few weeks.

Fish Toxicity (2,4-D Acid Technical)
- Bluegill 96 hour LC$_{50}$ 524 mg/L
- Rainbow trout 96 hour LC$_{50}$ 250 mg/L

Avian Toxicity (2,4-D Acid Technical)
- Quail Oral LD$_{50}$ 500 mg/kg
- Mallard Duck Oral Dietary LC$_{50}$ >5,500 ppm

Bee Toxicity Unknown

13. DISPOSAL CONSIDERATIONS

Do not contaminate water, food, or feed by storage or disposal.

Waste: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of federal law and may contaminate groundwater. If these wastes cannot be disposed of by use according to label instructions, contact your state Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.
13. DISPOSAL CONSIDERATIONS, continued

**Container:** Non-refillable containers: Do not reuse or refill this container. Triple rinse or pressure rinse container promptly after emptying. Offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Refillable containers: Refill this container with pesticide only. Do not reuse this container for any other purpose.

Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the re-filler.

Refer to the product label for additional and complete container handling instructions.

14. TRANSPORT INFORMATION

**DOT Classification:**
The material is classified as follows, when shipped in containers at or above 26 gallons:

**Proper Shipping Name:** UN3082, Environmentally Hazardous Substances, Liquid, N.O.S., (2,4-D dimethylamine), 9, PG 111, RQ (2,4-D salt)

**Transport Hazard Class:** Class 9

**UN Number:** UN3082

**Packing Group:** III

15. REGULATORY INFORMATION

**15.1 EPCRA SARA Title III Classifications:**
- **Section 311/312 Hazard Classes:** Immediate & Delayed Health
- **Section 313 Toxic Chemicals:** Not listed

**15.2 CERCLA/SARA 302 Reportable Quantity:**
100 lbs 2,4-D acid (approximately 26 gallons of 2,4-D 4lb Amine)

**15.3 California Prop 65:** Not listed.

**15.4 TSCA:**
This product is exempted from TSCA because it is solely for FIFRA regulated use.

16. OTHER INFORMATION

**SDS Version:** 2/5/2016

**HMIS Ratings:** Health 3, Flammability 1, Physical Hazard 1

The information and recommendations contained in this safety data sheet are understood to be correct by Van Diest Supply Company. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. Information in this SDS follows different criteria from, and serves a different purpose than the product labeling.