SAFETY DATA SHEET
EMERGENCY CALL: 1-800-424-9300 (CHEMTREC)

1. IDENTIFICATION

PRODUCT NAME: Hi-Yield® 2,4-D Amine
DESCRIPTION: A liquid herbicide.
EPA Reg. No.: 81927-38-7401

COMPANY IDENTIFICATION:
Voluntary Purchasing Groups, Inc.
230 FM 87
Bonham, TX 75418

2. HAZARD IDENTIFICATION

DANGER
Causes serious eye damage
Harmful to aquatic life
Harmful if swallowed
Harmful if inhaled

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Chemical Name</th>
<th>CAS #</th>
<th>Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,4-D Amine</td>
<td>Dimethylamine Salt of 2,4-Dichlorophenoxyacetic Acid</td>
<td>2008-39-1</td>
<td>47.2%</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact CHEMTREC at 1-800-424-9300 for emergency medical treatment information.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Immediately call a doctor or poison control center.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor or poison control center if you feel unwell.

IF SWALLOWED: Immediately call a poison control center or doctor. Rinse mouth out and 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.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

5. FIREFIGHTING MEASURES

Flash point (PMA-4): N/A
Flammable Limits (LFL-UFL): N/A
Fire and Explosion Hazards: Not a fire or explosion hazard.
Extinguishing Medium: Water spray, foam, dry chemical or carbon dioxide (CO₂).
Fire Fighting Equipment: Firefighters should be equipped with self-contained positive pressure breathing apparatus and full bunker gear.
Fire Fighting Instructions: Evacuate nonessential personnel to prevent exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area and equipment until decontaminated. Dike and collect any runoff to prevent entry to drains or water bodies.
Hazardous Combustion Products: Thermal decomposition may produce toxic gasses such as hydrogen chloride and oxides of carbon and nitrogen.
NFPA Ratings: Health – 3 / Flammability – 1 / Reactivity - 0
6. ACCIDENTAL RELEASE MEASURES

Clean up spills immediately observing the precautions in Section 8 of this SDS. Control spill at the source and prevent material from entering soil, sewers, waterways or low areas. If necessary, dike spill using absorbent or impervious materials such as clay or sand. Recover materials for reuse or disposal by pumping any free liquid into appropriate closed containers, do not flush to drain.

Large spills to soil may require removal of topsoil with the affected area removed and placed into appropriate containers for disposal. Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

7. HANDLING AND STORAGE

Keep out of reach of children. Do not get in eyes or on clothing, avoid contact with skin and avoid inhaling vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum using tobacco, or using the toilet. Remove and wash contaminated clothing before reuse.

Always store pesticides in a secured warehouse or storage building. Store at temperatures above 32°F. Open containers in well-ventilated areas. Keep container tightly sealed when not in use. Do not stack cardboard boxes more than two pallets high. Do not store near open containers of fertilizer, seed or other pesticides.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Handle only with adequate ventilation. Facilities storing or utilizing this material should be equipped with an eyewash station and a safety shower.

**Protective Clothing:** Wear long sleeved shirt, long pants, shoes, socks, and chemical resistant gloves and a face shield or goggles. When mixing, loading or cleaning up spills or equipment or otherwise exposed to concentrate, wear a chemical-resistant apron.

**General:** Wash clothing and other absorbent materials that have been exposed to this product. Follow the manufacturer’s instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Clear pale yellow liquid  
**Odor:** Phenolic-amine  
**pH:** 8.9 – 9.1  
**Density:** 9.7 lbs/gal  
**Solubility:** Soluble

10. STABILITY AND REACTIVITY

**CONDITIONS TO AVOID:** Excessive heat. Do not store near heat or flame.  
**CHEMICAL STABILITY:** Stable under all normal use and storage conditions.  
**HAZARDOUS DECOMPOSITION PRODUCTS:** May release toxic gasses when thermally decomposed.  
**INCOMPATIBILITY WITH OTHER MATERIALS:** Strong oxidizing agents, bases and acids.  
**POLYMERIZATION:** Will not occur.
11. TOXICOLOGICAL INFORMATION

ORAL TOXICITY (rat LD$_{50}$): 1,161 mg/kg
DERMAL TOXICITY (rat LD$_{50}$): > 5,000 mg/kg
INHALATION TOXICITY (rat LC$_{50}$): > 3.5 mg/L (4-hour)
EYE IRRITATION: Rabbit – Severely irritating / corrosive
SKIN IRRITATION: Rabbit – Slightly irritating
SKIN SENSITIZATION: Not sensitizing
CARCINOGENICITY:
EPA: Not Listed
ACGIH: Not Listed
NTP: Not Listed
IARC: Class 2B (chlorophenoxy herbicides)
OSHA: Not Listed
MUTAGENIC TOXICITY: No evidence of mutagenic effects during in vivo and in vitro assays.
REPRODUCTIVE TOXICITY: No evidence in animal studies.

12. ECOLOGICAL INFORMATION

This pesticide may be toxic to fish and aquatic invertebrates and may adversely affect non-target plants. 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.

The following is for the active ingredient, 2,4-D Amine:

AQUATIC TOXICITY
Bluegill (96-hr LC$_{50}$): 524 mg/L
Rainbow Trout (96-hr LC$_{50}$): 250 mg/L
Daphnia (48-hr EC$_{50}$): 184 mg/L

AVIAN TOXICITY
Bobwhite Quail (Oral LD$_{50}$): 500 mg/kg
Mallard Duck (8-day Dietary LC$_{50}$): > 5,620 ppm

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide wastes are toxic. If container is damaged or if pesticide has leaked, contain all spillage. Absorb and clean up all spilled material with granules or sand. Place in a closed, labeled container for proper disposal. Improper disposal of excess pesticide, spray mixtures, or rinsate is a violation of Federal law and may contaminate ground water. 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.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Refer to the product label for specific container handling instructions.

14. TRANSPORT INFORMATION

US DOT:
Containers < 21 Gallons:
Not regulated by DOT.

Containers > 21 Gallons:
DOT Shipping Name: UN3082, Environmentally Hazardous Substance, Liquid, N.O.S. (2,4-Dichlorophenoxyacetic Acid), 9, PG III
Reportable Quantity (RQ): 100 lbs. (26.3 gallons of product)
DOT Emergency Response Guide: 171
Marine Pollutant: Yes
15. REGULATORY INFORMATION

FIFRA –
This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the pesticide label:

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
DANGER: Corrosive. Causes irreversible eye damage. Harmful if swallowed. Harmful if absorbed through skin. Do not get in eyes or on clothing. Avoid contact with skin. Wear protective eyewear (goggles, face shield, safety glasses), long-sleeved shirt and long pants, shoes and socks, chemical resistant gloves (such as those listed in selection A on the EPA chemical-resistance category selection chart).
See inside label booklet for additional Precautionary Statements and Directions for Use including Storage and Disposal instructions.

ENVIRONMENTAL HAZARDS
This pesticide may be toxic to fish and aquatic invertebrates and may adversely affect non-target plants. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark except as noted on appropriate labels. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of equipment wash water or rinsate.

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.

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide. This product is excluded from listing requirements under EPA/TSCA.

SARA Title III – Section 302 Extremely Hazardous Substances
Not listed

SARA Title III – Section 311/312 Hazard Categories
Immediate, Delayed

SARA Title III – Section 312 Threshold Planning Quantity
N/A

SARA Title III – Section 313 Reportable Ingredients
2,4-Dichlorophenoxyacetic Acetic Acid (CAS No. 94-75-7): 47.2%

CERCLA –
2,4-Dichlorophenoxyacetic Acetic Acid (CAS No. 94-75-7): 100 lbs. (26.3 gallons of product)

CALIFORNIA PROP 65 STATUS –
This product does not contain any chemicals known to the state of California to cause cancer or reproductive toxicity.

CANADA –
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.
16. OTHER INFORMATION

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA APPROVED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety, and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

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Effective Date: 01/25/2016