

SAFETY DATA SHEET

Preparation Date June 1, 2017

1. Identification of the Substance/Preparation and of the Company

Product identifier	Delete Ultra Herbicide
Chemical names	2,4-Dichlorophenoxy acetic acid, dimethylamine salt Dicamba (3,6-dichloro- <u>o</u> -anisic acid)
EPA Product Reg. No.	87845-8
EPA Signal Word	Danger
Product type	liquid fungicide concentrate
Supplier information	Agromarketing Company, Inc., 133 Mavity St. Toronto, ON Canada M6P 2L8 416-628-5147
Emergency Number	CHEMTREC 1800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

Hazardous according to OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity oral	Category 4
Acute toxicity - Dermal	Category 4
Eye irritancy	Category 1
Skin irritation	Category 3
Non sensitizer	
Aquatic hazard (acute)	Category 1
Aquatic hazard (long term)	Category 2

Environmental Hazards

Toxic to fish and aquatic plants and invertebrates.

Physical Hazards

Combustible

Label elements

DANGER

Hazard statements

Corrosive. Causes irreversible eye damage. Harmful if absorbed through skin. Harmful if swallowed. Harmful if inhaled. May cause damage to organs (liver, kidney) through prolonged or repeated exposure

Toxic to aquatic life with long lasting effects



Precautionary Statements - Prevention

Do not handle until all safety precautions have been read and understood.

All mixers, loaders, applicators, flaggers, and other handlers must wear:

1. Long-sleeved shirt and long pants.

2. Shoes and socks.
3. Chemical resistant gloves (except for applicators using groundboom equipment, pilots, and flaggers)
 such as barrier laminate, butyl rubber \geq 14 mils, nitrile rubber \geq 14 mils, neoprene rubber \geq 14 mils, natural rubber \geq 14 mils, polyethylene, polyvinyl chloride (PVC) \geq 14 mils, or viton \geq 14 mils.
4. Chemical resistant apron when applying with any handheld nozzle or equipment, mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.
5. Wear protective eyewear (goggles or face shield).

Precautionary Statements - Response

Collect spillage. IF exposed or concerned: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. IF ON SKIN: Wash with plenty of soap and water

Call a POISON CENTER or doctor if you feel unwell

Wash contaminated clothing before reuse

If skin irritation or rash occurs: Get medical advice/attention

If medical advice is needed, have container and /or booklet label at hand.

Precautionary Statements - Storage

Store out of reach of children and domestic animals

Precautionary Statements - Disposal

Pesticide wastes are toxic. Triple rinse pesticide from containers and use rinsates in the pesticide application. 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.

Hazards Not Otherwise Classified (HNOC)

none known

OTHER INFORMATION

- toxic to aquatic life

3. Composition / information on ingredients			
Chemical Name	% w/w	CAS No.	Trade secret
dicamba DMA salt	12.4%	2300-66-5	N
2,4-D DMA salt	35.7%	2008-39-1	N
water softener	1%		
water	to 100%		

FIRST AID MEASURES

IF IN EYES:	<ul style="list-style-type: none"> • 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. • Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • 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 SWALLOWED:	<ul style="list-style-type: none">• 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
HOT LINE	
Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact 1-800-424-9300 for emergency medical treatment information.	
FOR CHEMICAL SPILL, LEAK, FIRE, OR EXPOSURE, CALL CHEMTREC (800) 424-9300	
NOTE TO PHYSICIAN Probable mucosal damage may contraindicate the use of gastric lavage.	

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Any fire extinguishing media (water, foam, dry chemical, CO₂) may be used.

Decomposition Products

Carbon dioxide, carbon monoxide, halogenated compounds

6. ACCIDENTAL RELEASE MEASURES

LAND SPILL:

Large spill: Dyke around spill as necessary. If wet, absorb product with a clay-based absorbent. Remove dry product, absorbent and contaminated soil for disposal in accordance with applicable local regulations.

Small spill: Remove contaminated soil and place in containers for disposal in accordance with applicable local regulations. Avoid contamination of water bodies during cleanup and disposal. Personal protective equipment is **not** needed to cleanup land spills.

SPILLAGE ONTO HARD SURFACES: Limit area of spillage by barricading if necessary. Absorb product with a clay-based absorbent. Sweep up or vacuum, and place product into containers for disposal in accordance with applicable local regulations. Clean surface with water.

SPILLAGE INTO WATER: Where possible, remove any intact containers from the water. Advise local water authority that none of the affected water should be used for irrigation or for the abstraction of potable water until natural dilution returns the tebuconazole and azoxystrobin values to a negligible level.

IN ALL CASES

Wear protective equipment as needed (see section 8).

7. HANDLING AND STORAGE

Precautions for safe handling

Handling Avoid contact with skin and eyes. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Keep out of reach of children. Wear protective gloves/clothing and eye/face protection.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a cool, well-ventilated place.

Incompatible materials Strong oxidizing agents. Acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS (8 hour TWA, ppm):

COMPONENT	OSHA PEL	ACIGH TLV
2,4-D	10 mg/M ³	10 mg/M ³

ENGINEERING CONTROLS: Enclosed Cockpits: Pilots must use an enclosed cockpit that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d) (4-6)].

Mechanical Flagging Engineering Controls: Human flagging is prohibited. Flagging to support aerial application is limited to use of the Global Positioning System (GPS) or mechanical flaggers.

PERSONAL PROTECTION:

Personal protective equipment

Applicators and other handlers must wear:

1. Long-sleeved shirt and long pants.
2. Shoes and socks.
3. Chemical resistant gloves (except for applicators using groundboom equipment, pilots, and flaggers)
such as barrier laminate, butyl rubber \geq 14 mils, nitrile rubber \geq 14 mils, neoprene rubber \geq 14 mils, natural rubber \geq 14 mils, polyethylene, polyvinyl chloride (PVC) \geq 14 mils, or viton \geq 14 mils.
4. Chemical resistant apron when applying with any handheld nozzle or equipment, mixing or loading, cleaning up spills or equipment, or otherwise exposed to the concentrate.
5. Wear protective eyewear (goggles or face shield).

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other absorbent materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

General hygiene considerations

Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Liquid
Appearance:	white emulsion
Odor:	Characteristic
Density:	1.156 g/ml
Vapor Pressure (mm/Hg):	Negligible @ 20°C
Solubility in Water:	soluble
Melting Point:	Not applicable
pH @ 20°C:	7.8 (1% in water)

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY (Conditions to avoid): Stable under normal conditions. Avoid extreme heat (>110°F)

INCOMPATIBILITY: Strong acids, strong oxidizing agents, water, quaternary ammonium salts, EBDC sequestering agents

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide, carbon monoxide, halogenated compounds

HAZARDOUS POLYMERIZATION: Will not occur

11. TOXICOLOGICAL INFORMATION

The following information is available for the formulation:

INGESTION:	Oral LD ₅₀ (rat)	<1800 mg/kg
DERMAL:	Dermal LD ₅₀ (rat)	>2000 mg/kg
INHALATION:	Inhalation LC50 (rat)	2.07 mg / L
SENSITIZATION:	Skin sensitization (guinea pig)	non-sensitizer
IRRITATION:	Primary eye irritation (rat)	corrosive to eyes
	Primary skin irritation (rat)	slight reversible irritation
OTHER TOXIC EFFECTS		
Chronic Effects: Repeated overexposure to phenoxy herbicides may cause effects to liver, kidneys, blood chemistry, and gross motor function. Rare cases of peripheral nerve damage have been reported, but extensive animal studies have failed to substantiate these observations, even at high doses for prolonged periods.		
Carcinogenicity: The International Agency for Research on Cancer (IARC) lists exposure to chlorophenoxy herbicides as a class 2B carcinogen, the category for limited evidence for carcinogenicity in humans. However, more current 2,4-D lifetime feeding studies in rats and mice did not show carcinogenic potential. The U.S. EPA has given 2,4-D a Class D classification (not classifiable as to human carcinogenicity).		
Mutagenicity: There have been some positive and some negative studies, but the weight of evidence is that 2,4-D is not mutagenic.		
Teratogenicity: Studies in laboratory animals with 2,4-D have shown decreased fetal body weights and delayed development in the offspring at doses toxic to mother animals.		
Reproductive Toxicity: No components are known to have effects on the reproductive system.		

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: This product is toxic to fish and aquatic invertebrates. 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.	
ECOTOXICITY DATA:	
Fish Acute and Prolonged Toxicity:	
Bluegill 96-hr LC50: 2,4-D acid = 524 mg/L; Dicamba acid = 135 mg/L	
Rainbow Trout 96-hr LC50: 2,4-D acid = 250 mg/L; Dicamba acid = 135 mg/L	
Aquatic Invertebrate Acute Toxicity: Not available	
Aquatic Plant Toxicity: Not available	
Bird Acute and Prolonged Toxicity: Bobwhite Quail oral LD50: 2,4-D acid = 500 mg/kg; Dicamba acid = unknown	
Mallard Duck oral LD50: 2,4-D acid = unknown; Dicamba acid = 2,000 mg/kg	
Mallard Duck 8 day Dietary LC50: 2,4-D acid >5,500 mg/kg	
Honeybee Toxicity: Non-toxic	
ENVIRONMENTAL EFFECTS:	
Soil Absorption/Mobility:	Not available
Persistence and degradability:	Not available
Bioaccumulative Potential:	Not available
Other adverse effects:	Not available

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

Pesticide wastes are hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or 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.

Contaminated packaging Refer to product label.

Section 14. Transport information

	DOT Classification	IMDG	IATA
UN number	UN3082	NA	NA
UN proper shipping name	This product is not regulated by the U.S. DOT as a hazardous material for ground shipment in packages of less than 30 gallons. For packages with capacity of 30 gallons to 924 gallons: UN3082, Environmentally hazardous substance, liquid, n.o.s. (2,4-D salt), 9, PG III, RQ For packages with capacity of 925 gallons or greater: UN3082, Environmentally hazardous substance, liquid, n.o.s. (2,4-D salt, Dicamba), 9, PG III, RQ	NA	NA
Transport hazard class(es)	9	9	9
Packing group	III	III	III
Environmental hazards	Yes.	Yes.	Yes.
Additional information	Non-bulk packages of this product are not regulated as hazardous materials unless transported by inland waterway. This product is not regulated as a hazardous material when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of §§ 173.24 and 173.24a.	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.	This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS:

TSCA Inventory: This product is exempt from TSCA inventory listing requirements as it is solely for FIFRA regulated use.

SARA Title III Information:

Section 302 - Extremely hazardous substances: None listed

Section 311/312 – Hazard Categories: Immediate (Acute); Delayed (Chronic)

Section 313 – The following chemicals are subject to the reporting requirements of Section 313 of Title III, Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372:

Dicamba and 2,4-D acid

CERCLA - This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):

2,4-D has an RQ of 100 lbs reached with approximately 34 gallons of product
Dicamba has an RQ of 1000 lbs reached with approximately 925 gallons of product.

California Prop 65

not listed

EPA Registration Information: 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. Following is the hazard information as required on the pesticide label:

DANGER

Corrosive.

Causes irreversible eye damage. Do not get in eyes or on clothing.

Harmful if swallowed or absorbed through skin. Avoid contact with skin.

16. OTHER INFORMATION

SDS Status:

Date of this Revision: June 1, 2017

Date of Previous Revision: NA

Person Responsible for Preparation: Don O'Shaughnessy, Ph.D., DABT, President DOC Inc.

Reasons for Revision: new product

DISCLAIMER:

This information is provided for the limited guidance to the user. While Agromarketing Company, Inc. believes that the information is, as of the date hereof, reliable, it is the user's responsibility to determine the suitability of the information for its purposes. The user is advised not to construe the information as absolutely complete since additional information may be necessary or desirable when particular, exceptional, or variable conditions or circumstances exist (like combinations with other materials), or because of applicable regulations. No express or implied warranty of merchantability or fitness for a particular purpose or otherwise is made hereunder with respect to the information or the product to which the information relates.

ABBREVIATIONS:

a.i.	-	Active ingredient
ACGIH	-	American Conference of Governmental Industrial Hygienists
CERCLA	-	Comprehensive Environmental Response, Compensation, and Liability Act
EPA	-	Environmental Protection Agency
FIFRA	-	Federal Insecticide, Fungicide, and Rodenticide Act
IARC	-	International Agency for Research on Cancer
NTP	-	National Toxicology Program
SARA	-	Superfund Amendments and Reauthorization Act
TSCA	-	Toxic Substances Control Act
DOT	-	Department of Transportation
IMDG	-	International Maritime Dangerous Goods

IATA - International Air Transport Association

This is the last page of this SDS. There should be 8 pages.