



SAFETY DATA SHEET

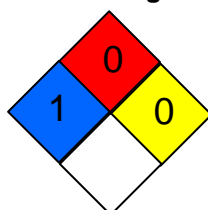
Oracle[®] Dicamba Agricultural Herbicide

1 Identification of the substance/mixture and of the company/undertaking

Date: 04/08/2016	CAS Number	EINECS Number	EPA Registration Number: 33658-30
	1918-00-9	217-635-6	Canada Registration Number: 26722
Supplier Factory	Gharda Chemicals Limited 760 Newtown Yardley Road Newtown, PA 18940 Phone: 1-215-968-9474 Fax: 1-215-968-9574		
Regional Office	Gharda Chemicals Limited 760 Newtown Yardley Road Newtown, PA 18940 Phone: 1-215-968-9474 Fax: 1-215-968-9574		
Emergency Response Telephone Numbers: For Spill Call: CHEMTREC: 1-(800)-424-9300 For Medical Call: 1-(866)-359-5660			

2 Hazards identification

Classification of Substance or Mixture
Classification According to Regulation (EC) NO 1272/2008



EMERGENCY OVERVIEW
EPA Signal Word: CAUTION



Acute Oral
Category 5

H302 Harmful if swallowed.

Acute Dermal
Category 5

H312 Harmful in contact with skin.
H318 Causes serious eye damage.

Acute Inhalation
Category 3

H332 Harmful if inhaled.

Aquatic Chronic
Category 3

H412 Harmful to aquatic life with long lasting effects.



R-22

Xn; Harmful
Harmful if swallowed.



R21,R36

Xi, Irritant
Harmful in contact with skin.
Irritating to eyes.



R 52-53

N; Dangerous for the environment.
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Label Elements

Single Word: CAUTION

Hazard Determining Component of Labelling:

Hazard Statements

H 302 Harmful if swallowed.
H 312 Harmful in contact with skin.
H 412 Harmful to aquatic life with long lasting effect.

Precautionary Statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P273 Avoid release to the environment.
P305 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and continue rinsing.
P351
P338

P308 IF exposed or concerned: Get medical advice/attention.
P313
P391 Collect spillage.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3 Composition/information on ingredients

INGREDIENTS:

	(% w/w)
Dicamba Dimethylamine Salt (CAS Reg. No. 2300-66-2)	49.77
DMA Salt of 3,6-dichloro-o-anisic acid *	
Dimethylamine Salt of Related Acids	0.60
Inert Ingredients	49.63

* Contains 41.35% dicamba acid equivalent, or 4 lbs/gallon (480 grams/liter)

Chemical Class: Benzoic acid herbicide

4 First aid measures

IF SWALLOWED: Call poison control center or doctor immediately for treatment advice. DO NOT give any liquid to the person. DO NOT induce vomiting unless told to do so by the poison control center or doctor. DO NOT give anything by mouth to an unconscious person.

IF INHALED: Remove person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for further treatment advice.

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. Call a poison control center or doctor for treatment advice.

5 Firefighting measures

Flash Point:	Does not flash
Flammability Limits:	LFL - Not applicable UFL - Not applicable
Extinguishing Media:	Water spray, foam, dry chemical. Foam fire-extinguishing system is preferred because uncontrolled water can spread possible contamination.
Fire-fighting Equipment:	Use positive-pressure self-contained breathing apparatus and full protective equipment. Toxic irritating gases can be formed.
Special Instructions:	DO NOT allow fire-fighting water to escape into waterways or sewers.

6 Accidental release measures

IN CASE OF SPILLS OR LEAKS: FOR EMERGENCY CALL CHEMTREC 1-800-424-9300. Absorb liquid with material such as sand, sawdust, or dirt. Sweep up and place in a suitable container for disposal. Area can be washed down with water and detergent to remove remaining herbicide. Keep product, contaminated materials and wash water out of sewers. Wash exposed body areas thoroughly after handling.

Fire

Small Fire

- Dry chemical, CO2, water spray or regular foam.

Large Fire

- Water spray, fog or regular foam.
- DO NOT scatter spilled material with high pressure water streams.
- Move containers from fire area if you can do it without risk.
- Dike fire-control water for later disposal.

Fire Involving Tanks

- Cool containers with flooding quantities of water until well after fire is out.
- Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- ALWAYS stay away from tanks engulfed in fire.

SPILL OR LEAK

- DO NOT touch or walk through spilled material.
- Stop leak if you can do it without risk.
- Prevent dust cloud.
- Avoid inhalation of asbestos dust.

Small Dry Spill

- With clean shovel place material into clean, dry container and cover loosely; move containers from spill area.

Small Spill

- Take up with sand or other non-combustible absorbent material and place into containers for later disposal.

Large Spill

- Dike far ahead of liquid spill for later disposal.
- Cover powder spill with plastic sheet or tarp to minimize spreading.
- Prevent entry into waterways, sewers, basements or confined areas.

7 Handling and storage

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep in original container, tightly closed when not in use. Protect from direct sunlight. Keep away from strong oxidising agents, acids and bases.

8 Exposure controls/personal protection

EXPOSURE GUIDELINE(S): ACGIH TLV and OSHA PEL levels are not established for dicamba acid or dicamba dimethylamine salt. For dimethylamine, the OSHA and ACGIH exposure limits based upon TWA and STEL are 9.2 mg/m³ and 27.6 mg/m³, respectively.

VENTILATION: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guideline.

RESPIRATORY PROTECTION: Atmospheric levels should be maintained below the exposure guideline. For most conditions, no respiratory protection should be needed; however, if the exposure guideline is exceeded, use an approved organic vapor/mist respirator.

EYE/FACE PROTECTION: Use protective eyewear.

SKIN PROTECTION: Wear long-sleeved shirt and long pants, waterproof gloves and shoes plus socks when handling.

9 Physical and chemical properties

Information on Basic Physical and Chemical Properties

General Information

Appearance:	Liquid
Form:	Solution
Color:	Amber
Odor	Mild amine odor
Melting Point:	Not applicable
Boiling Point:	Not determined
Flash Point:	> 100°C
Flammability (solid, gaseous):	Non flammable
Vapour Pressure	18 mm Hg at 20°C
Upper/Lower Flammability or Explosive Limit	Not determined
Vapour Density	>1.0 (Air=1)
Danger of explosion:	Non explosive
Density at 20 °C	9.68 lbs/gal (1.5 -1.1.6 g/cm ³)
Solubility	Fully soluble in water
pH	7 to 8
Stability	Stable

10 Stability and reactivity

Stability:	(CONDITIONS TO AVOID) None known.
Conditions to avoid:	(SPECIFIC MATERIALS TO AVOID) None known.
Hazardous decomposition products:	In a fire, steam, dicamba amine salt, hydrogen chloride, organochloride products, oxides of nitrogen, or carbon monoxide can be formed.
Hazardous polymerization:	No data available.

11 Toxicological information

Information on Toxicological Effects

Acute toxicity:

LD/LC50 values relevant for classification		
Oral	LD50	>2629 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rabbit)
Inhalation	LC50 / 4h	5.4 mg/l (rat)

EYE: Causes eye irritation.

SKIN CONTACT: Exposure may cause skin irritation and dermal sensitization.

SKIN ABSORPTION: The acute dermal toxicity is considered to be low. The percutaneous LD₅₀ for rabbits is greater than 2000 mg/kg.

INGESTION: The acute oral toxicity is considered to be low. The oral LD₅₀ for rats is 2629 mg/kg. Small amounts that might be swallowed incidental to normal handling operations are not likely to cause injury; swallowing larger amounts may be hazardous.

INHALATION: The acute inhalation toxicity is considered to be low. The LC₅₀ for rats is greater than 5.4 mg/l for 4 hours.

CANCER INFORMATION: Did not cause cancer in long-term animal studies. There were no treatment related increases in tumors at dietary levels up to 2500 ppm (rats and dogs) and 3000 ppm (mice).

TERATOLOGY (BIRTH DEFECTS): Did not cause birth defects in animal studies. Exposures having no effect on the mothers had no effect on the fetuses. The maternal and fetal no effect levels in rabbits were 30 mg/kg and 300 mg/kg, respectively. In the rat teratology study, the maternal and fetal no effect levels were 160 mg/kg and 400 mg/kg, respectively.

REPRODUCTIVE EFFECTS: Dicamba did not interfere with fertility in reproduction studies in laboratory animals. The no effect level in a two-generation rat reproduction study was 500 ppm.

MUTAGENICITY (EFFECTS ON GENETIC MATERIAL): Based on a number of in vivo and in vitro studies, the preponderance of data suggests that dicamba is not a mutagen.

12 Ecological information

DO NOT apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. DO NOT contaminate water when disposing of equipment wash water or rinsate. DO NOT apply directly to water, surface waters or runoff areas. Avoid spray drift and other means of exposure to sensitive plants and other non-target areas. This pesticide may cause injury to desirable trees and plants.

13 Disposal considerations

Pesticide spray mixture or rinsate that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by the 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.

14 Transport information

Land Transport ADR/RID (Cross-Border)



ADR/RID Class: Miscellaneous dangerous substances and articles
Danger Code (Kemler): 90
UN-Number: 3082
Packaging Group: III
Hazard Class: 9
Special Marking: (fish and tree)
UN Proper Shipping Name: Environmentally Hazardous Substances, Liquid, N.O.S. (Dicamba) = or > 248 Gallons
< 248 Gallons: Compounds, Tree or Weed Killing (Herbicides) NOIBN

Maritime Transport IMDG:



IMDG Class: Miscellaneous dangerous substances and articles
UN-Number: 3082
Packaging Group: III
Class: 9
EMS Number: F-A, S-A.
Marine Pollutant: (fish and tree)
Proper Shipping Name: Environmentally Hazardous Substances, Liquid, N.O.S. (Dicamba)

Air transport ICAO-TI and IATA-DGR:



IATA Class: Miscellaneous dangerous substances and articles
UN-Number: 3082
Packaging Group: III
Class: 9
EMS Number: F-A, S-A.
Marine Pollutant: (fish and tree)
Proper Shipping Name: Environmentally Hazardous Substances, Liquid, N.O.S. (Dicamba)

CANADA TDG CLASSIFICATION SOR/2008-34 (AMENDMENT 6)

15 Regulatory information

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

An immediate health hazard

TOXIC SUBSTANCES CONTROL ACT (TSCA): All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

OSHA HAZARD COMMUNICATION STANDARD: This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA, or SUPERFUND): This product contains the following substance(s) listed as "Hazardous Substances" under CERCLA, which may require reporting of releases:

Category:	Chemical Name	CAS Number	RQ	% in Product
	Dicamba	1918-00-9	1000	41.35%

16 Other information

Notice: This information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, expressed or implied, is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state and local laws and regulations.

Department Issuing SDS: Supply chain

Contact: sramanathan@gharda.com

Gharda Chemicals Limited
760 Newtown Yardley Road
Newtown, PA 18940

Abbreviations and Acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail).

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (Division of the American Chemical Society)

LC50: Lethal Concentration, 50 percent

LD50: Lethal Dose, 50 percent