



# SAFETY DATA SHEET

## 1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

PRODUCT NAME: Dicamba Solution (1 mg/mL)  
PRODUCT NUMBER: D165  
COMPANY INFO: *PhytoTechnology Laboratories*<sup>®</sup>  
PO Box 12205, Shawnee, KS 66282-2205  
Phone: 1-888-749-8682 or 1-913-341-5343; Fax: 1-888-449-8682 or 1-913-341-5442  
www.phytotechlab.com

EMERGENCY PHONE NUMBER: 1-800-535-5053 - US Only  
1-352-323-3500 - International

RECOMMENDED USE: For Research Use Only

RESTRICTIONS ON USE: Products sold by *PhytoTechnology Laboratories*<sup>®</sup> are intended for research and laboratory use only. Products are not to be used as human or animal therapeutics, cosmetics, agricultural or pesticidal products, food additives, or as household chemicals.

## 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification:

- H302 – Acute toxicity, Oral (Category 4)
- H318 – Serious eye damage (Category 1)
- H402 – Acute aquatic toxicity (Category 3)
- H412 – Chronic aquatic toxicity (Category 3)

GHS Label elements, including hazard and precautionary statements:



Signal Word: **Danger**

Hazard Statements:

- H302 – Harmful if swallowed.
- H318 – Causes serious eye damage.
- H412 – Harmful to aquatic life with long lasting effects.

Precautionary Statements:

- P280 – Wear protective gloves/protective clothing/eye protection/face protection.
- P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: 3,6-Dichloro-o-anisic Acid  
CAS No.: 1918-00-9  
Formula:  $C_8H_6Cl_2O_3$   
Molecular Weight: 221.04 g/mol

Ingredient	CAS Number	Percent	Hazardous
Dicamba	1918-00-9	0.1 %	No exposure limits established by OSHA or ACGIH
Potassium Hydroxide 1.0 N	1310-58-3	1-5 %	ACGIH TLV: 2 mg/m <sup>3</sup>
Water	7732-18-5	94-99 %	No exposure limits established by OSHA or ACGIH

#### 4. FIRST AID MEASURES

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Route of Entry	Symptoms	First Aid Procedures
Ingestion	May cause irritation if swallowed	If swallowed, wash out mouth with water. Never give anything by mouth to an unconscious person. <b>Get medical attention.</b>
Inhalation	May cause irritation to respiratory tract	Safely remove victim to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. <b>Get medical attention.</b>
Eye Contact	Direct contact may cause irritation. May cause redness, tearing, or blurred vision.	Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. <b>Get medical attention if irritation persists.</b>
Skin Contact	Irritating. May cause reddening, itching or inflammation.	Wash area thoroughly with soap and water. Remove and wash contaminated clothing. <b>Get medical attention if irritation persists.</b>

Most Important Symptoms or Effects, Both Acute and Delayed:

See section 2 and/or section 11

Recommendation for Immediate Medical Care and Special Treatment Needed:

No data available

#### 5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Water spray, carbon dioxide, dry chemical powder, or appropriate foam. Use extinguishing media suitable for surrounding fire.

Special Protective Equipment and Precaution for Firefighters: In the event of a fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus. Evacuate the area and fight fire from a safe distance.

Hazardous Combustion Products: May emit toxic fumes under fire conditions.

Toxic Gases Produced: Carbon dioxide, carbon monoxide, hydrogen chloride gas, chlorine

#### 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protection recommended in Section 8. Avoid breathing vapours, mist or gas. Ensure adequate ventilation, especially in confined areas. Evacuate personnel to safe areas.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Method of Containment and Cleanup: Using caution and the proper protective equipment contain the spilled material and do not let the product enter drains. Contact a licensed professional waste disposal service to dispose of this material.

#### 7. HANDLING AND STORAGE

Precaution for Safe Handling: Avoid contact with skin and eyes. Avoid incompatible substances. Wash thoroughly after use.

Conditions for Safe Storage: Keep in a tightly closed container and store in a cool, dry, and well-ventilated area.

Incompatibilities: Strong oxidizing agent

Recommended Storage Temperature: 2 to 6 °C

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA's Permissible Exposure Limits (PELs): No data available

Threshold Limit Values (TLVs): No data available

Engineering Controls: Handle in accordance to general industrial hygiene and safety practice.

Personal Protective Equipment (PPE):

Eye/Face Protection: Chemical safety glasses or goggles. Have eye-washing facilities readily available where eye contact can occur.

Skin Protection: Protective gloves

Body Protection: Lab coat

Respiratory Protection: A NIOSH/MSHA approved air purifying respirator

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colorless, clear liquid

pH (1.00 mL/L): Under Development

Solubility: Miscible with Water

Melting Point: No data available

Vapor Density: No data available

Vapor Pressure: No data available

Odor: Odorless

Odor Threshold: No data available

Viscosity: No data available

Relative Density: ~1 g/cm<sup>3</sup>

Evaporation Rate: No data available

Initial Boiling Point and Boiling Range: No data available

Flammability (solid, gas): No data available

Partition coefficient: No data available  
n-octanol/water):

Auto-ignition Temperature: No data available

Decomposition Temperature: No data available

Flash Point (Closed Cup): No data available

Flammable Limits: Upper (%) – No data available Lower (%) – No data available

## 10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical Stability: Stable under normal conditions of use

Possibility of Hazard Reactions: Will not occur

Conditions to Avoid: Excessive heat

Incompatibles Materials: Strong oxidizing agents

Hazardous Decomposition Products: Carbon dioxide, carbon monoxide, hydrogen chloride gas, chlorine

## 11. TOXICOLOGICAL INFORMATION

Toxicity: LD<sub>50</sub> (Oral-Rat)(mg/Kg): 1039

LD<sub>50</sub> (Unreported Route-Mouse)(mg/Kg): 700

LD<sub>50</sub> (Oral-Mouse)(mg/Kg): 1190

Carcinogenicity: NTP: No  
IARC: No  
Z List: No  
OSHA Reg: No

Reproductive Toxicity: No data available

Symptoms Associated with Overexposure: Irritation, itching, gastrointestinal upset, ataxia, possible mutagenic and reproductive effects, nausea, vomiting, weakness, breathing difficulties

Specific Target Organ Toxicity: Single Exposure: No data available  
Repeated Exposure: No data available

Target Organs: None identified

Medical Conditions Aggravated By Exposure: None identified

Routes of Entry: Ingestion, inhalation, skin and eye contact

NIOSH/RTECS NO:

*The toxicological properties of this product have not been thoroughly investigated*

## 12. ECOLOGICAL INFORMATION

Ecotoxicity: Toxicity to fish – LC50 – rainbow trout – 28 mg/L – 96 hrs  
Toxicity to daphnia – EC50 – water flea – 96.8 mg/L – 48 hrs

Persistence and Degradability: No data available

Bioaccumulative Potential: No data available

Mobility in Soil: No data available

Other Adverse Effects: Harmful to aquatic life with long lasting effects.

## 13. DISPOSAL CONSIDERATION

Disposal Procedure: Dispose in accordance with all applicable federal, state, and local environmental regulations.

EPA Hazardous Waste Number: No data available

## 14. TRANSPORT INFORMATION

Domestic (D.O.T.): Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)  
Hazard Class: N/A  
UN/NA: N/A  
Labels: N/A

International:

IMDG: Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)  
Hazard Class: N/A  
UN/NA: N/A  
Labels: N/A

IATA: Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)

Hazard Class: N/A  
 UN/NA: N/A  
 Labels: N/A

**15. REGULATORY INFORMATION**

TSCA: No  
 SARA TITLE III:  
 Section 302 (EHS) Ingredients: No  
 Section 313 Ingredients: No  
 Section 304 (EHS/CERCLA) Ingredients: Yes - Dicamba  
 Section 311/312 Hazard: No SARA Hazards

**16. OTHER INFORMATION**

HMIS Rating:	<b>Health Hazard</b>	<b>Chronic Health Hazard</b>	<b>Flammability</b>	<b>Physical Hazard</b>
	2		0	0
NFPA Rating:	<b>Health Hazard</b>	<b>Fire Hazard</b>	<b>Reactivity Hazard</b>	<b>Special Hazard</b>
	2	0	0	

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