

Safety Data Sheet CLARIFIER



SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: Clarifier
EPA Registration No. 7969-137-33270
Product Type: Herbicide
Active Ingredient(s): Diglycolamine salt of 3,6-dichloro-o-anisic acid
Manufacturer/Registrant: United Suppliers, Inc.
30473 260th St.
Eldora, IA 50627

FOR MEDICAL EMERGENCIES: Contact the National Pesticide Information Center 1-800-858-7378
FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident, call CHEMTREC 1-800-424-9300

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

THE FOLLOWING HAZARDS ARE IDENTIFIED ACCORDING TO OSHA HCS CLASSIFICATION (29 CFR 1910.1200).

Hazard Classifications:

Specific target organ toxicity (single exposure): Category 3
Hazardous to the aquatic environment - chronic

Signal Word: WARNING

Pictograms:



Hazard Statements:

- May cause respiratory irritation.
- Harmful to aquatic life with long lasting effects.

Precautionary Statements:

- Avoid breathing dust, fume, gas, mist, vapors or spray. Use only outdoors or in a well-ventilated area. If inhaled, Remove victim to fresh air and keep comfortable for breathing. Call a poison center if you feel unwell. Store in a well-ventilated place. Keep container tightly closed.

Contact Chemtrec for emergency medical treatment at 1- 800-424-9300.

Storage and Disposal: See Section 7 and 13.

Other Hazards: See Section 11 and 12.

SECTION 3. HAZARDS IDENTIFICATION

<u>Component Name</u>	<u>CAS-No.</u>	<u>Average % by Weight</u>
Benzoic acid, 3,6-dichloro-2-methoxy-, compd. with 2-(2-aminoethoxy) ethanol (1:1) (Synonyms: diglycolamine salt of dicamba)	104040-79-1	58.1
Proprietary ingredients		49.1

SECTION 4. FIRST AID MEASURES

- If Swallowed:** Call a 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 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 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 5 minutes, then continue rinsing eye.
Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or when going for treatment. You may also contact the National Pesticide Information Center 1-800-858-7378 for emergency medical treatment information.

SECTION 5. FIRE FIGHTING MEASURES

Fire and Explosion:

Flash Point:	> 100°C	
Flammable Limits (% in Air):	Lower: % Not available	Upper: % Not available
Autoignition Temperature:	Not available	
Flammability:	Not available	

Unusual Fire, Explosion and Reactivity Hazards:

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.

Hazardous Decomposition Products:

Carbon monoxides, carbon dioxide, nitrogen oxides, sulfur oxides.

In Case of Fire:

Use foam, dry chemical, CO₂ extinguishing media. Firefighters should be equipped with self-contained breathing apparatus and turn-out gear. Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Environmental Precautions: Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.

Methods and Material for Containment and Cleaning Up: Dike spillage. Pick up with suitable absorbent material. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

SECTION 7. HANDLING AND STORAGE

RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. PESTICIDE APPLICATORS AND WORKERS must refer to the Product Label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR Part 170. Ensure adequate ventilation. Provide good ventilation of working area (local exhaust ventilation if necessary). Keep away from sources of ignition – No smoking. Keep container tightly sealed. Protect against heat. Protect contents from the

effects of light. Protect from air. Handle and open container with care. Do not open until ready to use. Once container is opened, content should be used as soon as possible. Avoid aerosol formation. Provide means for controlling leaks and spills. Do not return residues to the storage containers. Follow label warnings even after container is emptied. The substance/product may be handled only by appropriately trained personnel/ Avoid all direct contact with the substance/product. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapors.

Protection against Fire and Explosion: The relevant fire protection measures should be noted. Fire extinguishers should be kept handy. Avoid all sources of ignition: heat, sparks, open flame. Sources of ignition should be kept well clear. Avoid extreme heat. Keep away from oxidizable substances. Electrical equipment should conform to national electric code. Ground all transfer equipment properly to prevent electrostatic discharge. Electrostatic discharge may cause ignition.

Store product between 0oC to 40oC. Changes in the properties of the product may occur if product is stored beyond the indicated temperatures for extended periods of time. Further information on Storage Conditions; Keep only in the original container in a cool, dry, well ventilated place away from ignition sources, heat or flame. Protect containers from physical damage. Protect against contamination. Segregate from foods and animals feeds.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT. FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

Skin/Hand Protection: Wear long-sleeved shirt, long pants, socks, and shoes. Chemical resistant protective gloves. Protective equipment selection must be based on the user's assessment of the workplace hazards.

Eye/Face Protection: Wear chemical protective eyewear (goggles, face shield or safety glasses). Wear face shield if splashing hazard exists.

Respiratory Requirements: Wear respiratory protection if ventilation is inadequate. Wear a NIOSH-certified (or equivalent) TC23C Chemical/Mechanical type filter system to remove a combination of particles, gas and vapours. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

General Protective and Hygiene Measures: Wear long sleeved work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with a shower and an eye wash. Handle in accordance with good industrial hygiene and safety practice. Personal protective equipment should be decontaminated prior to reuse. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks). Remove contaminated clothing. Store work clothing separately. Hands and/or face should be washed before breaks and at the end of the shift. No eating, drinking, smoking or tobacco use at the place of work. Keep away from food, drink and animal feeding stuffs.

User Safety Recommendations:

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Engineering Controls: See product label. Provide general and/or local exhaust ventilation to control airborne levels below the exposure guideline. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Light blue-green liquid

Odor: Mild, pleasant, sweetish

Odor Threshold: Not determined due to potential health hazard by inhalation

pH: 8 @25°C (undiluted substance)
Flash Point: > 100°C (No flash point – measurement made up to the boiling point)
Flammability: Not flammable (based on the structure or composition there is no indication of flammability)
Density: 1.23 g/cm³ (25°C)
Water Solubility: Soluble
Viscosity: 22.4 mPa.s @25°C
Flammability (Solid, Gas): Not applicable
Upper/Lower Flammability/Explosive Limits: Not available
Auto-ignition Temperature: 465°C (Directive 92/69/EEC, A. 15) (The product has not been tested. The statement has been derived from substance/products of a similar structure of composition.)
Explosibility: Not available
Solubility: Not available
Partition Coefficient (n-Octanol/Water): -1.8 @25°C (OECD Guideline 107 information on Dicamba)
Vapor Pressure: 23.3 hPa (20°C) (information applies to the solvent)
Vapor Density: Not applicable
Freezing point: approx. < 0°C
Boiling Point: > 100°C
Evaporation Rate: Not available
Decomposition Temperature: Not available

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable under normal use and storage conditions.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Avoid all sources of ignition: heat, sparks, open flame. Avoid prolonged storage. Avoid electro-static discharge. Avoid contamination. Avoid prolonged exposure to extreme heat. Avoid extreme temperatures.
Materials to Avoid: Strong acids, bases and oxidizing agents.
Hazardous Decomposition Products: Thermal decomposition includes carbon oxides (CO_x), Hydrogen chloride, Hydrogen fluoride, Sulfur oxides. No hazardous decomposition products if stored and handled as indicated.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity/Irritation Studies: Slightly toxic after single ingestion. Slightly toxic after short-term skin contact. Relatively nontoxic after short-term inhalation.

Acute oral toxicity:	LD ₅₀ (Rat)	> 2,000 mg/kg
Acute Dermal toxicity:	LD ₅₀ (Rabbit):	> 2,000 mg/kg
Acute inhalation toxicity:	LC ₅₀ (Rat):	> 5.3 mg/L (4 hr)
Eye irritation:	May cause moderate but temporary irritation to the eyes.	
Skin irritation:	May cause slightly irritating to the skin	
Skin Sensitization:	Non-sensitizing	

Primary Routes of Exposure: Inhalation, eye and skin contact.

Medical Conditions Aggravated By Overexposure: Individuals with pre-existing diseases of the respiratory system, skin or eyes may have increased susceptibility to excessive exposures.

Toxicological Information (Based on Dicamba):

Reproductive Toxicity: The product has not been tested. The results of animal studies on Dicamba gave no indication of a fertility impairing effect.

Teratogenicity: Causes developmental effects in animals at high, maternally toxic doses.

Mutagenicity: Results from a number of mutagenicity studies with microorganisms. Mammalian cell culture and mammals are available. Taking into account all of the information, there is no indication that the substance is mutagenic.

Carcinogenicity: In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.

Carcinogenicity Assessment:

ACGIH: None
NTP : None
IARC : None
OSHA : None

Toxicological Information of Other Ingredient :

Repeated Dose Toxicity: 2-(2-aminoethoxy) ethanol
Assessment of repeated dose toxicity. After repeated administration the prominent effect is the induction of corrosion.

SECTION 12. ECOLOGICAL INFORMATION

Environmental Precautions:

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 washwaters or rinsate. Apply this product only as directed on the label. This chemical is known to leach through soil into ground water under certain conditions as a result of agricultural use. Use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in ground water contamination.

There is a high probability that the product is not acutely harmful to fish. There is a high probability that the product is not acutely harmful to aquatic invertebrates. Acutely toxic for aquatic plants.

Ecological information (Based on Dicamba):

Rainbow trout LC₅₀ (96h): >100 mg/L
Daphnia magna EC₅₀ (static, 48h): >100 mg/L
Northern bobwhite quail LD₅₀: 1,265 mg/kg
Lemna gibba EC₅₀ (7d): > 100 mg/L

Mobility in Soil: Dicamba will not evaporate into the atmosphere from the water surface. Following exposure to soil, the product trickles away and can – dependent on degradation – be transported to deeper soil areas with larger water loads.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal: Pesticide wastes are regulated. Improper disposal of excess pesticide, spray mix or rinsate is a violation of federal law. If pesticide wastes cannot be disposed of according to label instructions, contact the State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

Container Disposal: Rinse thoroughly at least three times (triple rinse) in accordance with EPA recommendations. Consult state or local disposal authorities for approved alternative procedures such as container recycling. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

SECTION 14. TRANSPORT INFORMATION

USDOT: Not regulated

(Note: This product is regulated if the amount in a single receptacle exceeds the Reportable Quantity (RQ). Please refer

to Section 15 of this SDS for the RQ for this product.)

ICAO/IATA: Not Regulated

IMDG/IMO: Not Regulated

SECTION 15. REGULATORY INFORMATION

FIFRA 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 for safety data sheet, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

CAUTION Causes moderate eye irritation. Harmful if swallowed or absorbed through skin. Avoid contact with skin, eyes or clothing.

SARA 311/212 Hazard Categories:

Section 311/312 Acute Health Hazard

Chronic Health Hazard

Section 313 Chemical(s) Dicamba (CAS No. 1918-00-9)

CERCLA/SARA 302 Reportable Quantity (RQ): Dicamba (CAS No. 1918-00-9) RQ= 1000 lbs.

RCRA Hazardous Waste Classification (40 CFR 261): Not applicable

TSCA List: The ingredients of this product are listed on the TSCA inventory or are exempt.

CA Proposition 65: Not applicable

State Right-To-Know Ingredients: Not applicable

SECTION 16. OTHER INFORMATION

NFPA 704 (National Fire Protection Association) Rating:

Health - 1 Flammability - 1 Reactivity - 1 Others - None

0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard

SDS DATE: 9-10-2015. Supersedes version dated 11-5-2008. Revised for OSHA 2012 HCS compliance.

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions.