



SAFETY DATA SHEET

BCF FERTILIZER WITH BARRICADE MC HERBICIDE

EMERGENCY NUMBER: 1-800-424-9300
BONUS CROP FERTILIZER, INC.
GREENVILLE, TEXAS 75403
Effective Date: August 1, 2014

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT: BARRICADE MC HERBICIDE
ACTIVE INGREDIENT(%): Prodiamine (0.38%)
CHEMICAL NAME: N3, N3-Di-n-propyl-2, 4-dinitro-6-(trifluoromethyl)-m-phenylenediamine
CHEMICAL CLASS: Dinitroaniline Herbicide
EPA SIGNAL WORD: CAUTION
EPA REGISTRATION NO.: 100-1456

COMPANY IDENTIFICATION:

Bonus Crop Fertilizer, Inc.
P O Box 1062
Greenville, Texas 75403

2. HAZARDOUS IDENTIFICATIONS:

EMERGENCY OVERVIEW

Color: Greenish-yellow
Physical State: Powder
Odor: Odor-less
Hazards of product:
CAUTION! Powdered material may form explosive dust-air mixture. Toxic fumes may be released in fire situations. Highly toxic to fish and/or aquatic organisms.
EMERGENCY PHONE NUMBER: 800-222-1222

OSHA Hazard Communication Standard

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



Health and Environmental

Harmful if inhaled. May be harmful in contact with skin. May cause an allergic skin reaction. Causes mild eye irritation. May form flammable dust-air mixture.

Hazardous Decomposition Products

None known.

Unusual Fire, Explosion and Reactivity Hazards

This material is considered explosive class (Kst) 2. Fire will spread by burning with flame. During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion. See also Section 7.

3. COMPOSITION/INFORMATION INGREDIENTS:

Material: Crystalline Silica, Quartz and Cristobalite
OSHA PEL: 10 mg/m³ (%SiO₂+2) (respirable dust)
ACGIH TLV: 0.025 mg/m³ (respirable silica)
OTHER: 0.05 mg/m³ (respirable dust)**
NTP/ARC/OSHA/Carcinogen: IARC; ACGIH 1

Material: Kaolin Clay
OSHA PEL: 15 mg/m³ TWA (total); 5 mg/m³ TWA (respirable)
ACGIH TLV: 2 mg/m³ TWA (respirable)
OTHER: 10 mg/m³ TWA (total); 5 mg/m³ TWA (respirable)**
NTP/ARC/OSHA/Carcinogen: No

Material: Prodiamine (65.0%)
OSHA PEL: Not established.
ACGIH TLV: Not established.
OTHER: 10 mg/m³ TWA***
NTP/ARC/OSHA/Carcinogen: No

**recommended by NIOOSH

***Syngenta Occupational Exposure Limit (OEL)

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications. Syngenta Hazard Category: C, S

4. FIRST AID:

Have the product container, label or Safety Data Sheet with you when calling a poison control center or doctor, or going for treatment.

INGESTION: If swallowed: Call the Poison Control Center (1-800-222-1222) or doctor immediately for treatment advice. Have the person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so after calling 1-800-222-1222 or a doctor. Do not give anything by mouth to an unconscious person.

EYE CONTACT: 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 the Poison Control Center (1-800-222-1222) or doctor for treatment advice.

SKIN CONTACT: If on skin or clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call the Poison Control Center (1-800-222-1222) or doctor for treatment advice.

INHALATION: If inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give



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artificial respiration, preferably mouth-to-mouth if possible. Call the Poison Control Center 1-800-222-1222 or doctor for further treatment advice.

Notes to Physician

There is no specific antidote if this product is ingested. Treat symptomatically. Person suffering a temporary allergic reaction may respond to treatment with antihistamines or steroid creams and/or systemic steroids.

Medical Condition Likely to be Aggravated by Exposure

None known.

5. FIRE FIGHTING MEASURES

Fire and Explosion

Flash Point (Test method): Not applicable.
Flammable Limits (% in Air): Lower: Not Applicable.
Upper: Not Applicable
Autoignition Temperature: Not Applicable.
Flammability: Combustible powder.

Unusual Fire, Explosion and Reactivity Hazards

This material is considered explosion class (Kst)2.

Fire will spread by burning with flame.

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

See also Section 7.

In Case of Fire

Use appropriate extinguishing media for combustibles in the area. Wear full protective clothing and self-contained breathing apparatus. Evacuate non-essential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

6. ACCIDENTAL RELEASE MEASURES:

In Case of Spill or Leak

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Sweep up material and place in compatible disposal container. Scrub area with hard water detergent (e.g. commercial products such as Tide, Joy, Spic and Span). Pick up wash liquid with additional absorbent and

place into compatible disposal container. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposition.

7. HANDLING AND STORAGE:

This material is capable of forming dust clouds in air, which, if ignited, can produce a dust cloud explosion. Flames, hot surfaces, mechanical sparks and electrostatic discharges can serve as ignition sources for this material. Electrical equipment should be compatible with the flammability characteristics of this material. The flammability characteristics will be made worse if the material contains traces of flammable solvents or is handled in the presence of flammable solvents.

In general personnel handling this material and all conducting equipment should be electrically earthed or grounded. Bulk bags (FIBC) used to contain this material should be Type B, Type C, or Type D. Type C bags must be electrically grounded or earthed before powder is charged to or discharged from the bag. If metal or fiber drums are used to contain this material, make certain the metal parts are bonded to the filling equipment and grounded.

This material can become readily charged in most operations.

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use and cosmetic application in area where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATION CONSULT THE PRODUCT LABEL.

INGESTION: Prevent eating, drinking, tobacco usage and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

EYE CONTACT: Where eye contact is likely, use dust-proof chemical goggles.



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SKIN CONTACT: Where contact is likely, wear chemical-resistant gloves (such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyethylene, polyvinyl chloride [PVC] or Viton), coveralls, socks and chemical-resistant footwear.

INHALATION: A particulate filter respirator may be necessary until effective engineering controls are installed to comply with occupational exposure limits. Use a NIOSH certified respirator with any R, P or HE filter.

Use a self-contained breathing apparatus in case of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

9. PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE

Physical State	Powder.
Color	Greenish-yellow.
Odor	Odorless
pH	9.13 @ 77°F (25°C)
Melting Point	255° F
Freezing Point	Not applicable
Boiling Point (760 mmHg)	Not applicable

Solubility in H₂O

Prodiamine: 0.013 ppm @ 77°F (25°C)

Vapor Pressure

Prodiamine: <5.6X10⁻⁶mmHg@ 68° F (20°C)

10. STABILITY AND REACTIVITY:

Stability: Stable under normal use and storage conditions.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Thermal, mechanical and electrical ignition sources.

Materials to Avoid: Oxidizing agents.

Hazardous Decomposition Products: None known.

11. TOXICOLOGICAL INFORMATION:

ACUTE TOXICITY/IRRITATION STUDIES(Finished Product)

Ingestion: Oral (LD50 Rat): >5000 mg/kg body weight

Dermal: Dermal (LD50 Rat): >2000 mg/kg body weight

Inhalation: Inhalation (LD50 Rat): >1,8 mg/1 air – 4 hours

Eye Contact: Mildly irritating (Rabbit)

Skin Contact: Non-Irritating (Rabbit)

Skin Sensitization: Sensitizing (Guinea Pig)

Reproductive/Development Effects

Prodiamine: Fetal toxicity at high dose level (rats); developmental and material toxicity observed at 1g/kg/day.

Chronic/Subchronic Toxicity Studies

Prodiamine: Liver (alteration and enlargement) and thyroid effects (hormone imbalances) at high dose levels (rats); decreased body weight gains.

Carcinogenicity

Prodiamine: Benign thyroid tumors (rat). None observed (mouse).

Other Toxicity Information

None

Toxicity of Other Components

Crystalline Silica, Quartz and Cristobalite:

Chronic inhalation exposure to crystalline silica is known to cause silicosis and pulmonary fibrosis in humans.

Experimental animals exposed to crystalline silica developed respiratory tract cancers.

Kaolin Clay:

May cause eye and respiratory tract irritation.

Long-term exposure to high concentration of this dust may produce x-ray evidence of dust in the lungs.

Continued long-term exposure may affect respiratory function in some individuals.

Target Organs

Active Ingredients

Prodiamine: Liver, thyroid

Inert Ingredients



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Crystalline Silica, Quartz and Cristobalite:
Respiratory Tract.

Kaolin Clay: Eye, respiratory tract, lung

12. ECOLOGICAL INFORMATION:

Ecotoxicity Effects

Prodiamine:
Fish (Bluegill Sunfish) 96-hour LC50 > 552ppb
Invertebrate (Water Flea) Daphnia Magna 48-hour
EC50 > 83 ppb
Bird (Bobwhite Quail) 14-day LD50 > 2250 mg/kg

Environmental Fate

Prodiamine:
The information presented here is for the active ingredient, prodiamine.
Does not bioaccumulate. Persistent in soil. Stable in water. Immobile in soil. Sinks in water (after 24 hrs).

13. DISPOSAL CONSIDERATIONS:

Disposal

Do not reuse product containers. Dispose of product containers, waste containers, and residues according to local, state and federal health and environmental regulations.

Characteristic Waste: Not Applicable
Listed Waste: Not Applicable

14. TRANSPORT INFORMATION:

DOT Classification

Ground Transport – NAFTA
Not regulated.

Comments

Water Transport – International
Proper Shipping Name: Environmentally Hazardous Substance, Solid, N. O. S. (Prodiamine), Marine Pollutant
Hazard Class: Class 9
Identification Number: UN 3077
Packing Group: PG III

Air Transport
Proper Shipping Name: Environmentally Hazardous Substance, Solid, N.O.S. (Prodiamine)
Hazard Class: Class 9
Identification Number: UN 3077
Packing Group: PG III

15. REGULATORY INFORMATION:

ERCRA SARA Title III Classification

Section 311/312 Hazard Classes: Acute Health Hazard
Chronic Health Hazard
Fire Hazard

Section 313 Toxic Chemicals: Not applicable.

California Proposition 65

Not applicable.

CERLA/SAA 302 Reportable Quantity (RO)

None.

RCRA Hazardous Waste Classification (40 CFR 261)

Not Applicable.

16. OTHER INFORMATION:

NFPA Hazard Ratings

Health	2
Flammability	3
Instability	1

HMIS Hazard Ratings

Health	2
Flammability	3
Reactivity	1

0	Minimal
1	Slight
2	Moderate
3	Serious
4	Extreme

For non-emergency questions about this product call:
1-800-336-2434

Bonus Crop Fertilizer, Inc. urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the Buyer's/User's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the Buyer's/User's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such manufacturer-specific (M)SDS, we are not and cannot be responsible for (M)SDS obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.