

MATERIAL SAFETY DATA SHEET

BRAZOS

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Real Farm Technologies LLC
605 12th Street
Aurora, NE 68818

EPA REG. NO.: 84930-3-89286

PRODUCT NAME: BRAZOS

CHEMICAL NAME: Mepiquat Chloride: N,N-dimethylpiperidinium chloride

CHEMICAL FAMILY: Plant growth regulator

Hotline Numbers: For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night
Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – CAUTION: Harmful if swallowed or absorbed through skin. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Mepiquat Chloride	4.2	15302-91-7	Not listed

4. FIRST AID MEASURES

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.

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 Swallowed: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by the poison control center or doctor. Have person sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person.

If Inhaled: Move 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 treatment advice.

Note to Physician: No specific antidote is available. Treat the patient symptomatically.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT have the product container or label with you when calling a poison control center or doctor.

5. FIRE FIGHTING MEASURES

FLASH POINT (^oF/Test Method): >200°F

FLAMMABLE LIMITS (LFL & UFL): Not established

EXTINGUISHING MEDIA: Use foam, dry chemical, carbon dioxide, water spray or fog.

HAZARDOUS COMBUSTION PRODUCTS: Toxic fumes may be emitted in a fire situation.

SPECIAL FIRE FIGHTING PROCEDURES: Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Fire exposed containers can build up pressure and should be kept cool with water spray if possible. Explosive vapor could form from ruptured containers. Dike and collect water used to fight fire to prevent environmental damage due to run off. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Containers may expand and burst at elevated temperatures.

FIRE FIGHTING EQUIPMENT: Self-contained breathing apparatus with full facepiece. Full fire fighting turn-out gear (Bunker gear).

HAZARDOUS COMBUSTION PRODUCTS: Hydrogen Chloride, oxides of carbon and nitrogen.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: In case of leak or spill, contain material and dispose as waste. Do not contaminate any body of water. Pick up spilled liquid with absorbent material and sweep up for disposal. Place it and damaged unusable containers in a landfill appropriate for non hazardous chemical waste. Check local, state and federal regulations for proper disposal. **NOTE:** Prevent spilled material from flowing onto adjacent land, or into municipal sewers and open bodies of water. Always wear proper protective equipment when working with the product.

7. HANDLING AND STORAGE

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

handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

STORAGE: Store in a cool, dry place. Keep out of reach of children and animals. Store in original containers only. Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240 (d) (4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

RESPIRATORY PROTECTION: Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.

EYE PROTECTION: Wear chemical goggles or shielded safety glasses when handling and mixing product.

SKIN PROTECTION: Wear protective clothing: long-sleeved shirts and pants, shoes plus socks and chemical-resistant gloves. Always refer to the label of the pesticide(s) in the tank mix and follow the most restrictive requirements.

Personal Protective Equipment (PPE): wear long-sleeved shirt and long pants, Chemical-resistant gloves (such as nitrile, butyl, neoprene and/or barrier laminate) and Shoes plus socks.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Reddish liquid, Odorless

SPECIFIC GRAVITY (Water=1): 1.00 g/ml

VAPOR PRESSURE: Not established

VAPOR DENSITY: Not established

PERCENT VOLATILE (by volume): Not established

Note: These physical data are typical values based on material tested but may vary from sample to sample.

Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

SOLUBILITY: Soluble **pH:** 7.0

BULK DENSITY: 8.34 lbs/gal.

BOILING POINT: Not established

VISCOSITY: 278.5 mPa s @ 20°C

EVAPORATION RATE: Not established

10. STABILITY AND REACTIVITY

STABILITY: Stable under proper storage conditions.

CONDITIONS TO AVOID: Temperatures above 125°F or below 32°F.

IMCOMPATIBILITY: None Known

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of hydrogen and nitrogen.

11. TOXICOLOGICAL INFORMATION

Based on a similar formulation

Acute Oral LD₅₀: >5,000 mg/kg (female)

Eye Irritation: Slightly irritating

Inhalation LC₅₀: >4.0 mg/L

Carcinogenic Potential: None listed in OSHA, NTP, IARC, or ACGIH

Acute Dermal LD₅₀: >2,000 mg/kg (Rat)

Skin Irritation: Slightly irritating

Skin sensitization: Not a contact sensitizer

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Data on Technical:

96-hour LC50 Rainbow Trout:	4300 mg/l	Bobwhite Quail Oral LD50:	>2,000 mg/kg
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Mallard Duck Oral LD50:	>2,000 mg/kg	Honey Bee:	Non toxic
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13. DISPOSAL CONSIDERATIONS

Do not reuse product containers. Triple rinse (or equivalent), then offer for recycling at an ACRC site (go to <http://www.acrecycle.org/> for locations) or by reconditioning, or puncture and dispose of in a sanitary landfill or by other procedures approved by local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT Shipping Description: Not Regulated

DOT HAZARD CLASS: None

UN NUMBER: None

DOT PACKING GROUP: None

DOT PRIMARY/SECONDARY LABEL: None

DOT PRIMARY/SECONDARY PLACARD: None

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15. REGULATORY INFORMATION

NFPA RATINGS: Least = 0 Slight = 1 Moderate = 2 High = 3 Severe = 4
Ratings for this product: Health – 2 Flammability – 1 Instability – 0 Special Hazards – None Specified

SARA Title III Hazard Category: Immediate Y Fire N Sudden Release of Pressure N
Delayed N Reactive N

Reportable Quantity (RQ) under U.S. CERCLA: None

SARA, Title III, Section 313: None

CA Proposition 65: Not Listed

16. OTHER

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