

1. IDENTIFICATION

PRODUCT NAME: Mepiquat PGR
DESCRIPTION: A liquid plant growth regulator.
EPA Reg. No.: 83520-2

COMPANY IDENTIFICATION:
Tacoma Ag, LLC
PO Box 14073
Durham, NC 27713

2. HAZARD IDENTIFICATION



WARNING
Harmful if swallowed
Causes eye irritation
May be harmful in contact with skin

3. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Common Name</u>	<u>Chemical Name</u>	<u>CAS #</u>	<u>Composition</u>
Mepiquat chloride	N,N-Dimethylpiperidinium chloride	24307-26-4	4.2%

4. FIRST AID MEASURES

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

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. If eye irritation persists: Get medical attention/advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with water for 15-20 minutes. Call a doctor or poison control center if you feel unwell.

IF SWALLOWED: Immediately call a poison control center or doctor. Rinse mouth out and have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

5. FIREFIGHTING MEASURES

Flash Point: Not a flammable liquid

Flammable Limits: N/A

Fire and Explosion Hazards: Can release irritating and toxic gases in a fire resulting from thermal decomposition.

Extinguishing Medium: Water spray, dry foam, dry chemical or carbon dioxide (CO₂).

Fire Fighting Equipment: Firefighters should be equipped with self-contained positive pressure breathing apparatus and full bunker gear.

Fire Fighting Instructions: Evacuate the area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Dike and collect water used to fight fire. Dry extinguishing systems are preferred to prevent excessive water runoff.

Hazardous Combustion Products: Hydrogen chloride and nitrous oxide.

NFPA Ratings: Health – 1 / Flammability – 1 / Reactivity - 0

6. ACCIDENTAL RELEASE MEASURES

Clean up spills immediately, observing precautions in Section 8 of this SDS. Isolate hazard area. Keep unnecessary personnel from entering.

Spills: Absorb liquid with material such as clay, sand, sawdust, or dirt. Sweep up and place in a suitable container for disposal and label the contents. Follow this by washing with strong soap and water solution. Absorb any excess liquid as indicated above, and add to the disposal container. Keep product, contaminated materials and wash water out of streams and sewers. Wash exposed body areas thoroughly after handling.

Large Spills: Contain large spills and recover for disposal. After removal, scrub the area with detergent and water and neutralize with dilute alkaline solutions of soda ash, or lime. Prevent from contaminating soil or from entering sewage and drainage systems and bodies of water.

7. HANDLING AND STORAGE

Keep out of reach of children.

Handling: Use only in a well ventilated area. Avoid contact with eyes, skin or clothing.

Storage: Keep in original container, tightly closed, out of reach of children. Keep away from food, drink and animal feeding stuffs. Containers should be stored in a cool, dry, well-ventilated area away from flammable materials and sources of heat or flame. Do not store below 32°F or above 100°F.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Provide general and/or local exhaust ventilation. Ventilate all transport vehicles prior to unloading. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Protective Clothing: Wear coveralls or long-sleeved shirt and long pants, shoes plus socks, and chemical resistant gloves (such as nitrile, neoprene, or Viton), and chemical goggles.

Supplied air respirators should be worn if large quantities of mist are generated or prolonged exposure is possible.

General: 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. Discard clothing and other absorbent materials that have been heavily contaminated with this product. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Pink liquid

Odor: Odorless

pH: 8 – 9

Density: 8.35 lbs/gal at ambient temperature

Solubility: Completely soluble in water

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID: Avoid excessive heat and fire.

CHEMICAL STABILITY: Stable under all normal use and storage conditions. May decompose if heated.

INCOMPATIBILITY WITH OTHER MATERIALS: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride and nitrous oxide.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ORAL TOXICITY (rat LD₅₀): 6,950 mg/kg

DERMAL TOXICITY (rat LD₅₀): > 2,000 mg/kg

INHALATION TOXICITY (rat LC₅₀): 20 mg/L (7-hour)

EYE IRRITATION: Rabbit – Slightly irritating

SKIN IRRITATION: Rabbit – Slightly irritating

SKIN SENSITIZATION: Not a contact sensitizer

CARCINOGENICITY:

EPA: Not Listed

ACGIH: Not Listed

IARC: Not Listed

NTP: Not Listed

OSHA: Not Listed

MUTAGENIC TOXICITY: No evidence of mutagenic effects during *in vivo* and *in vitro* assays.

REPRODUCTIVE TOXICITY: Not known to cause reproductive or birth defects at normal exposure levels.

12. ECOLOGICAL INFORMATION

Mepiquat chloride is not acutely toxic to fish or wildlife. High concentrations of this product may be toxic to fish and aquatic invertebrates. Do not contaminate water by cleaning of equipment or disposal of equipment washwaters.

Although mepiquat chloride is stable to hydrolysis and photolysis, it is rapidly decomposed in the environment by microbial breakdown into CO₂ (the half-life in soil ranged from 3 to 21 days). Mepiquat chloride is non-mobile in soils and it does not bioaccumulate.

AQUATIC TOXICITY

Rainbow Trout (96-hr LC₅₀): 4,300 mg/L

Daphnia (48-hr EC₅₀): 68.5 mg/L

AVIAN TOXICITY

Bobwhite Quail (Oral LD₅₀): > 2,000 mg/kg

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Wastes resulting from the use of this product may be disposed of on site. Improper disposal of excess pesticide spray mix, or rinsate is a violation of Federal law. If these wastes cannot be disposed of according to label instructions, contact the state agency responsible for pesticide regulation or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill this container. Refer to the product label for specific container disposal instructions.

14. TRANSPORT INFORMATION

US DOT:

Not regulated by DOT.

15. REGULATORY INFORMATION

FIFRA –

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 required for safety data sheets, and for workplace labels of non-pesticide chemicals. The following is the hazard information as required on the pesticide label:

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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

See inside label booklet for additional Precautionary Statements and Directions for Use including Storage and Disposal instructions.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwaters.

All pesticides are governed under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The regulatory information presented below is pertinent only when this product is handled outside of the normal use and application as a pesticide. This product is excluded from listing requirements under EPA/TSCA.

SARA Title III – Section 302 Extremely Hazardous Substances

Not listed

SARA Title III – Section 311/312 Hazard Categories

Immediate

SARA Title III – Section 312 Threshold Planning Quantity

N/A

SARA Title III – Section 313 Reportable Ingredients

None

CERCLA Reportable Quantity (RQ) –

None

CALIFORNIA PROP 65 STATUS –

This product does not contain any chemical known to the state of California to cause cancer or reproductive harm.

CANADA –

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

16. OTHER INFORMATION

DISCLAIMER: The information herein is presented in good faith and believed to be accurate as on 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.

SDS Version: 4.0 (conversion from MSDS)

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