

# SAFETY DATA SHEET

EMERGENCY CALL: 1-800-424-9300 (CHEMTREC)



## Section 1: Material and Company Identification

**Product Name:** MEPIQUAT PGR  
**EPA Reg. No:** 83520-2  
**Chemical Class:** Quarternary Ammonium Salt

**Company Identification:**

**TACOMA AG, LLC**

P.O. Box 14073  
Durham, North Carolina 27709-9998

## Section 2: Hazards Identification

Classification in accordance with regulation HCS 29CFR §1910.1200



**WARNING**

Harmful if swallowed or absorbed through skin.  
Causes moderate eye irritation.

**Potential Health Effects:**

**EYE:** Slightly irritating to the eye, but does not injury to eye tissue.

**SKIN:** Slightly irritating to the skin. The acute dermal toxicity is considered to be low. The dermal LD50 for rabbits is greater than 5,000 mg/kg.

**INGESTION:** The acute oral toxicity is considered to be low. The oral LD50 for rats is 6,950 mg/kg. Small amounts that might be swallowed incidental to normal handling operations are not likely to cause injury; however, swallowing larger amounts can result in apathy, difficulty breathing, decreased muscular coordination or control.

**INHALATION:** The acute inhalation toxicity is considered to be low. The inhalation LC50 for rats is greater than 20 mg/l for 4 hours. Inhalation of large amounts of mists may result in respiratory irritation and possible narcosis.

**SYSTEMIC (OTHER TARGET ORGAN) EFFECTS:**

**CANCER:** Chronic feeding studies with mepiquat chloride in mice and rats indicated no treatment related effects or any evidence of carcinogenicity in laboratory animals.

**BIRTH DEFECTS:** Mepiquat chloride did not cause embryotoxicity, fetotoxicity, or any other teratogenic effects in animal studies.



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**REPRODUCTION:** Mepiquat chloride did not interfere with fertility in animal reproduction studies. The no effect level in a two-generation rat reproduction study was 147 mg/kg/day.

**MUTAGENICITY:** Based on a number of *in vivo* and *in vitro* studies, it was concluded that mepiquat chloride is not a mutagen.

**Potential Physical Hazards:** Can decompose at high temperatures forming irritating and toxic gases.

**Environmental Hazards:** May be Toxic to fish, other aquatic organisms. Keep out of waterways.

## Section 3: Composition/ Information on Ingredients

<u>MATERIAL:</u>	<u>% BY WT.</u>
Mepiquat Chloride (CAS #24307-26-4)	4.2%
Other Ingredients:	95.8%

## Section 4: First Aid Measures

### FIRST AID

- 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 swallowed:** Call a poison control center or doctor immediately for treatment advice. 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.
- 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.

Have product container or label with you when calling a poison control center or doctor or going for treatment. For information on this product, contact the National Pesticide Information Center, 1-800-858-7378, Monday –Friday, 7:30 AM – 3:30 PM PST. You may also contact the National Poison Control Center, 1-800-222-1222, day or night for emergency medical treatment information.

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## Section 5: Fire-Fighting Measures

### NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:

Category	Rating
Health	1
Flammability	0
Reactivity	0

**FLASH POINT:** Not flammable.

**FIRE AND EXPLOSION HAZARD:** Can releasing irritating and toxic gases in a fire resulting from thermal decomposition.

**EXTINGUISHING MEDIA:** Use dry foam, dry chemical, carbon dioxide, or water spray when fighting fires involving this material.

**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-extinguishing systems are preferred to prevent environmental damage with excessive water run-off.

**FIRE FIGHTING EQUIPMENT:** Self-contained breathing apparatus with full face-piece. Full fire fighting turnout gear (Bunker gear).

**HAZARDOUS COMBUSTION PRODUCTS:** Hydrogen chloride and nitrous oxide.

## Section 6: Accidental Release Measures

**SPILLS OR LEAKS:** Wear protective clothing as described in Section 8 of this SDS. 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 a 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.

## Section 7: Handling and Storage

Keep out of reach of children. Do not contaminate water, food or feed by storage or disposal.

**HANDLING:** Wear proper safety equipment specified in Section 8 when mixing, loading or otherwise handling this product.

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**STORAGE:** Store in a locked area in original container only, with lid tightly closed. Do not store below 32° F or above 100° F. Store in a dry place away from heat or open flame. Store separately from other pesticides and fertilizers, food, and feed to prevent contamination. Use care to avoid puncturing container during storage or transit.

## Section 8: Exposure Controls/Personal Protection

**EXPOSURE LIMITS:** (8 hour TLV): None established.

<u>MATERIAL:</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Active Ingredient: Mepiquat Chloride	Not established	Not established
Other Ingredients:	Not established	Not established

**VENTILATION:** Provide general and/or local exhaust ventilation. Ventilate all transport vehicles prior to unloading.

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

**Applicators and other handlers must wear:** Long-sleeved shirt and long pants; Chemical-resistant gloves (such as nitrile, butyl, neoprene and/or barrier laminate); Shoes plus socks

Follow the manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

### User Safety Recommendations

Users should:

- Wash hands 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.

### Engineering Controls Statement

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 pesticide [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

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## Section 9: Physical and Chemical Properties

Color:	Pink
Physical State:	Liquid
Odor:	Odorless
Density:	8.35 lbs/gal
Solubility:	Completely soluble
Viscosity:	1.084 (20°C)
pH:	8-9 in an aqueous solution
Stability:	Stable

## Section 10: Stability and Reactivity

<b>CHEMICAL STABILITY:</b>	Stable, however may decompose if heated.
<b>CONDITIONS TO AVOID:</b>	Avoid excessive heat and fire.
<b>INCOMPATIBILITY WITH OTHER MATERIALS:</b>	None known.
<b>HAZARDOUS DECOMPOSITION PRODUCTS:</b>	Hydrogen chloride and nitrous oxide.
<b>HAZARDOUS POLYMERIZATION:</b>	Product will not undergo polymerization.

## Section 11: Toxicological Information

<b>ACUTE TOXICITY:</b>	
<b>ORAL (rat):</b>	The oral LD <sub>50</sub> is 6,950 mg/kg .
<b>DERMAL(rat):</b>	The dermal LD <sub>50</sub> is > 5,000mg/kg.
<b>INHALATION (rat):</b>	The LC <sub>50</sub> (4h) is > 20 mg/l air.
<b>EYE IRRITATION (rabbit):</b>	Causes slight eye irritation.
<b>SKIN IRRITATION (rabbit):</b>	Causes slight skin irritation
<b>SKIN SENSITIZATION (guinea pig):</b>	Sensitizer.

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## Section 12: Ecological Information

**ENVIRONMENTAL SUMMARY:** 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 or rinsate. 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.

**AQUATIC TOXICITY:** LC50 (96h) for rainbow trout-4,300 mg/l  
LC50(48h) for Daphnia-68.5 mg/l

**AVIAN TOXICITY:** LD50 Bobwhite quail- >2,000mg/kg

**PHYSICAL ENVIRONMENTAL PROPERTIES:** Although mepiquat chloride is stable to hydrolysis and photolysis, it is rapidly decomposed in the environment by microbial breakdown into CO<sub>2</sub> (the half-life in soil ranged from 3 to 21 days). Mepiquat chloride is non-mobile in soils and it does not bioaccumulate.

**ENVIRONMENTAL TOXICOLOGY:** Mepiquat chloride is not acutely toxic to fish or wildlife.

## Section 13: Disposal Considerations

Do not contaminate water, food or feed by storage and disposal.

**Pesticide Disposal:** Pesticide wastes are toxic. Wastes resulting from this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Container Handling: Nonrefillable Containers 5 Gallons or Less:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

**Container Handling: Nonrefillable containers larger than 5 gallons:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. **Triple rinse as follows:** Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace



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and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

**Container Handling: Refillable containers larger than 55 gallons:** Refillable container. Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or a mix tank. Fill the container about 10% full with water and, if possible, spray all sides while adding water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

## Section 14: Transport Information

<b>PROPER SHIPPING NAME:</b>	Not regulated by DOT
<b>HAZARD CLASS OR DIVISION:</b>	None
<b>IDENTIFICATION NUMBER:</b>	None
<b>PACKING GROUP: ADDITIONAL INFORMATION:</b>	Not applicable None

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

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

All pesticides are governed under FIFRA(Federal insecticide, Fungicide, and Rodenticide Act). Therefore, the regulations presented are pertinent only when handled outside of the normal use and applications of pesticides. This includes waste streams resulting from manufacturing/formulation facilities, spills or misuse of products, and storage of large quantities of products containing hazardous or extremely hazardous substances.

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## OSHA HAZARD

**COMMUNICATION STANDARD STATUS:** Non-hazardous

**CERCLA REPORTABLE QUANTITY:** Not Listed

### SARA TITLE III STATUS:

- 302 Extremely Hazardous Substance: Not Listed
- 311/312 Hazard Categories: Not Listed
- 313 Toxic Chemicals: Not Listed
- California Proposition 65 Status: Not Listed

## Section 16: Other Information

This document is prepared pursuant to the OSHA Hazard Communication Standard (HCS) (29 CFR Part 1910.1200(g)), revised in 2012. In addition, other substances not "Hazardous" per this OSHA Standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard.

**NOTICE:** The information herein is presented in good faith and believed to be accurate as of 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. See SDS for health and safety information.

**Original Date:** August 8, 2006

**Revised:** May 21, 2015