

NFPA HAZARD RATING				U.S. TRANSPORT SUMMARY	
0	Least			Not regulated by the U.S. Department of Transportation as a hazardous material; see Section 14 for additional information.	
1	Slight	1	Health		
2	Moderate	0	Flammability		
3	High	0	Reactivity		
4	Severe				

SECTION 1: IDENTIFICATION	
Product Name:	Compact®
EPA Registration #:	1381-189
Product ID/Unity #:	10051672, 10120837
Common Name:	Mepiquat Chloride Herbicide
Chemical Description (Active Ingredient):	N,N-dimethylpiperidinium Chloride
Recommended Uses:	Plant Growth Regulator. See product label for complete list of recommended uses and use site.
Restrictions for Use:	See product label for information regarding restrictions on the use of this product
Manufactured For: WINFIELD SOLUTIONS, LLC P. O. Box 64589 St. Paul, MN 55164-0589	<b>MEDICAL EMERGENCY TELEPHONE NUMBER: 1-877-424-7452 (24hrs)</b>  <b>Non-Emergency Business Inquiries: 1-855-494-6343</b> Mon – Fri 8am – 5pm (Central Standard Time)
FOR EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT, CALL: CHEMTREC 1-800-424-9300 (24 hours)	

SECTION 2: HAZARDS IDENTIFICATION	
<b>OSHA HCS 2012 CLASSIFICATION:</b> This chemical is considered hazardous according to the OSHA Hazard Communication Standard 2012 (29 CFR 1910.1200). Eye Damage/Irritation Category 2B	
<b>EMERGENCY OVERVIEW</b>	
<b>SIGNAL WORD:</b> WARNING	
<b>HAZARD STATEMENTS:</b> Causes eye irritation.	
<b>Appearance:</b> Pale red to pink liquid	<b>Physical State:</b> Liquid
<b>Odor:</b> No appreciable odor	
<b>PRECAUTIONARY STATEMENTS:</b>	
<b>Prevention:</b>	Wash hands thoroughly after handling.
<b>Response:</b>	<b>If in eyes:</b> Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice.
<b>Storage:</b>	See Section 7 for Storage Information.
<b>Disposal:</b>	See Section 13 for Disposal Considerations.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS		
Ingredient	% (wt)	CAS Reg. #
Mepiquat Chloride	4.2	24307-26-4
*Ingredients not specifically listed are non-hazardous and/or are considered to be confidential business information under 29 CFR 1910.1200(i).		
See Section 8 for exposure limits.		

SECTION 4: FIRST AID MEASURES	
Ingestion:	Call a poison control center or doctor immediately for treatment advice. Rinse mouth out with water and then have person sip a glass of water if able to swallow. 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.
Eyes:	Hold eye open and rise 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.
Skin:	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 irritation occurs. Wash contaminated clothing separately before reuse.
Inhalation:	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 further treatment advice.

SECTION 5: FIRE FIGHTING MEASURES	
<b>Suitable Extinguishing Media:</b>	Recommended for large fires: water spray or foam. Recommended for small fires: dry chemical or carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable Extinguishing Media:</b>	Do not use straight streams
<b>Special Fire Fighting Procedures:</b>	Wear NIOSH/MSHA approved self-contained breathing apparatus and full bunker gear. If water is used to fight fire or cool containers, dike to prevent runoff contamination of municipal sewers or waterways. Dispose of fire control water later. Avoid breathing vapors; keep upwind.
<b>Hazardous Combustion Products:</b>	May produce gases including but not limited to hydrogen chloride, and oxides of nitrogen and hydrogen.
<b>Unusual Fire and Explosion Hazards:</b>	Closed containers may explode from vapor expansion in high heat.

SECTION 6: ACCIDENTAL RELEASE MEASURES	
<b>Personal Precautions:</b>	Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.
<b>Environmental Precautions:</b>	Keep spilled product from entering sewers or waterways.
<b>Methods for Containment:</b>	Dike spill with an inert absorbent material such as sand, vermiculite or other appropriate material. Do not use combustible materials such as sawdust. Collect and contain contaminated absorbent and dike material for disposal.
<b>Methods for Clean-up:</b>	Vacuum, scoop, or sweep up material and place in a container for disposal. Do not place spilled material back in original container.
<b>Other Information:</b>	Spills of this product may require reporting under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). See Section 15 for additional information.

SECTION 7: HANDLING AND STORAGE	
<b>Handling:</b>	RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. PESTICIDE APPLICATORS AND WORKERS must refer to the pesticide product label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with EPA Worker Protection Standard 40 CFR part 170. Do not get in eyes or on skin or clothing. Do not breathe vapors or spray mist. Ensure adequate ventilation. Immediately clean up spills that occur during handling. Keep containers closed when not in use. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics. Remove clothing/Personal Protective Equipment (PPE) 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 change into clean clothing.
<b>Storage:</b>	Store in cool, dry areas away from children, feed and food products and sources of heat. Store in original container with lid tightly closed. Store in a secure location. <b>See pesticide product label for additional storage information.</b>
<b>Minimum Storage Temperature:</b>	Do not store below 32°F or above 100°F.
<b>Other Precautions:</b>	Consult Federal, state and local laws and regulations pertaining to storage.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION			
Exposure Guidelines Component:	OSHA PEL	ACGIH TLV	NIOSH REL
None Established			
<b>Engineering Controls:</b>	<b>Local Exhaust:</b> Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred.		
<b>Skin Protection:</b> Wear chemical resistant gloves, long sleeved shirt, long pants, shoes and socks. An emergency shower or water supply should be readily accessible to the work area.			
<b>Eye Protection:</b> Wear chemical goggles or safety glasses and full-face shield. Contact lenses are not eye protective devices. An emergency eyewash or water supply should be readily accessible to the work area.			
<b>Respiratory Protection:</b> Not normally required. If vapors or mists exceed acceptable levels or if irritation occurs, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides and organic vapors.			
<b>NOTE TO END USERS:</b> PERSONAL PROTECTIVE EQUIPMENT (PPE) AND CLOTHING LISTED IN THIS SECTION IS FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD REFER TO THE PESTICIDE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT (PPE) AND CLOTHING.			
<b>Work/Hygienic Practices:</b> Never eat, drink, nor use tobacco in work areas. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.			

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES			
<b>Physical State:</b>	Liquid	<b>Specific Gravity (H<sub>2</sub>O=1):</b>	1 g/ml
<b>Vapor Pressure (mm Hg):</b>	Not determined	<b>Density (lbs/gallon):</b>	8.35 lbs/gallon
<b>Vapor Density (Air=1):</b>	Not determined	<b>Melting Point/Freezing Point:</b>	Not determined
<b>Solubility in Water:</b>	Soluble	<b>Boiling Point/Range:</b>	Not determined
<b>Viscosity:</b>	Not determined	<b>pH (1% dispersion):</b>	5 to 8
<b>Appearance and odor:</b>	Light red to pink in color with no appreciable odor.	<b>Flash Point:</b>	Will not flash

SECTION 10: STABILITY AND REACTIVITY	
<b>Reactivity:</b> None known.	
<b>Chemical Stability:</b> Product is stable at ambient temperature and pressure, under normal storage and handling conditions.	
<b>Possibility of Hazardous Reactions:</b> Hazardous polymerization will not occur.	
<b>Conditions to Avoid:</b> Avoid excessive heat. Do not store near heat or flame	
<b>Incompatible Materials:</b> Oxidizing agents, bases and acids	
<b>Hazardous Decomposition Products:</b> May produce gases including but not limited to hydrogen chloride, and oxides of nitrogen and hydrogen.	

SECTION 11: TOXICOLOGICAL INFORMATION	
<b>ACUTE TOXICITY (Data is from a similar but not identical product)</b>	
<b>Acute Oral Effects:</b>	The LD <sub>50</sub> in rats is > 5,000 mg/kg.
<b>Acute Dermal:</b>	The LD <sub>50</sub> in rats is > 5,000 mg/kg.
<b>Acute Inhalation Effects:</b>	The 4 hour LC <sub>50</sub> in rats is > 20 mg/L.
<b>Skin Irritation:</b>	May cause slight irritation.
<b>Skin Sensitization:</b>	Did not cause sensitization in laboratory animals.
<b>Eye Irritation:</b>	May cause moderate eye irritation.
<b>Percent of product with unknown acute toxicity:</b> 0%	
<b>SUBCHRONIC / CHRONIC TOXICITY</b>	
<b>Subchronic (Target Organ) Effects:</b>	Excessive exposure to mepiquat chloride may affect the kidneys.
<b>Chronic Health Effects:</b>	Mepiquat chloride caused kidney effects and/or neurological sign in chronic toxicity studies in dogs and rats.
<i>Continued on next page</i>	

**Carcinogenicity:** This product does not contain ingredients that are considered to be probable or suspected human carcinogens.

ACGIH	IARC	NTP	OSHA
Not listed	Not listed	Not listed	Not listed

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

**Reproductive Toxicity:** None known.

**Developmental Toxicity:** None known.

**SECTION 12: ECOLOGICAL INFORMATION**

**ECOTOXICITY DATA:** Data on 46% Mepiquat Chloride

96-hour LC <sub>50</sub> Bluegill: 2,580 mg/l	Bobwhite Quail 8-day Dietary LC <sub>50</sub> : >4,600 ppm
96-hour LC <sub>50</sub> Rainbow Trout: 730 mg/l	Bobwhite Quail Oral LD <sub>50</sub> : >2,134 mg/kg
48-hour EC <sub>50</sub> Daphnia: 50.8 mg/l	Mallard Duck 8-Day Dietary LC <sub>50</sub> : >4,600 ppm
Honey Bee LD <sub>50</sub> : >100 ug/bee	

**Environmental Fate:** Mepiquat chloride is stable to hydrolysis and photolysis. Soil and aqueous photolysis are not routes of dissipation. Under aerobic conditions, mepiquat chloride appears to degrade rapidly to CO<sub>2</sub>. Under anaerobic conditions, it appears to be stable.

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste:** Dispose of in accordance with applicable Federal, state and local laws and regulations.

**Container:** Triple rinse and recycle the container or dispose of in accordance with Federal, state and local laws and regulations.

**See pesticide product label for full instructions on disposal.**

**RCRA Characteristics:** It is the responsibility of the individual disposing of this product to determine the RCRA classification and hazard status of the waste.

**SECTION 14: TRANSPORT INFORMATION**

**DOT:** Not regulated  
**(Ground)**

**IMDG:** Not determined  
**(Sea)**

**IATA:** Not determined  
**(Air)**

**TDG:** Not determined  
**(Canada)**

**SECTION 15: REGULATORY INFORMATION**

**TSCA Inventory:** This product is exempt from TSCA inventory listing requirements as it is solely for FIFRA regulated use.

**SARA Title III Information:**

**Section 302 - Extremely hazardous substances:** None listed

**Section 311/312 - Hazard Categories:** Immediate (Acute)

**Section 313 -** The following chemicals are subject to the reporting requirements of Section 313 of Title III, Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372:  
None listed

**CERCLA -** This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):  
None listed

**EPA Registration 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 workplace labels of non-pesticide chemicals. 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 and

clothing.

**State Information:**

California Proposition 65: Not listed

Other state regulations may apply. Check individual state requirements.

**SECTION 16: OTHER**

**Disclaimer:** The information presented herein is based on available data from reliable sources and is correct to the best of WinField Solutions' knowledge. WinField Solutions, LLC makes no warranty, express nor implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. We disclaim all liability for injury or damage stemming from any improper use of the material or product described herein.

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**Sections Revised:** All