

MATERIAL SAFETY DATA SHEET

SECTION 1: PRODUCT IDENTIFICATION

Technical name: Chlormequat chloride 750g/L SL

Chemical name: 2-chloro-*N,N,N*-trimethylethanaminium chloride

Structural formula:



CAS No.: 7003-89-6

Chemical class: Plant growth regulator

SECTION 2: COMPOSITION AND INGREDIENT INFORMATION

Chlormequat chloride	750g/L
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SECTION 3: HEALTH HAZARD INFORMATION

Emergency overview: Harmful by inhalation and if swallowed. Keep out of the reach of children.

SECTION 4: FIRST AID MEASURES

Eyes: Hold eyelids open to facilitate rinsing. Flush with copious amounts of water for at least 15 minutes. If symptoms persist, seek medical advice.

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Skin: Wash affected areas thoroughly with soap and water. Remove contaminated clothing. If irritation develops, seek medical attention

Swallowed: Rinse mouth and then drink plenty of water. Do not induce vomiting. Immediate medical attention required.

Inhalation: Keep patient calm, remove to fresh air. Assist in breathing if necessary. Consult a physician.

Notes to physician: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

SECTION 5: FIRE AND EXPLOSION INFORMATION

Suitable extinguishing media: water spray, foam, dry powder, carbon dioxide

Hazards during fire-fighting: Hydrogen chloride, carbon monoxide, carbon dioxide, nitrogen oxides, organochloric compounds. The substances/groups of substances mentioned can be released in case of fire.

Protective equipment for fire-fighting: Wear self-contained breathing apparatus and chemical-protective clothing.

Further information: In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Do not breathe vapor/spray. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.



Environmental precautions: Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

Cleanup: Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

For small amounts: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, and kieselguhr).

For large amounts: Dike spillage. Pump off product.

SECTION 7: HANDLING AND STORAGE

Handling: Do not smoke, drink or eat during handling. Wash hands using liquid detergent. Wear protective clothing to avoid contact and/or inhalation with the product. Before removing gloves wash them with soap and water. Eliminate all sources of ignition from areas where the material is handles or used. Good personal hygiene procedures must be practiced.

Storage: Place in cool and ventilated areas. Store only in closed, properly-labeled containers, in area designed specifically for pesticides. Keep out of the reach of children and unauthorized persons. Keep away from excessive heat and open flame. Properly keep away from food and drink. Incompatible with alkaline materials. Some alkyl sulfate of alkyl aryl sulphonate wetting agents are incompatible.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Respiratory protection: Wear a NIOSH-certified (or equivalent) organic vapor/particulate respirator as needed

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Hand protection: Chemical resistant protective gloves

Eye protection: Safety glasses with side-shields and face shield.

Body protection: Body protection must be chosen based on level of activity and exposure

General safety and hygiene measures: The statements on personal protective equipment in the instructions for use apply when handling crop protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Wash soiled clothing immediately.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Odor: Characteristic

pH: 4.0-8.0

SECTION 10: STABILITY AND REACTIVITY INFORMATION

Conditions to avoid: Avoid all sources of ignition: heat, sparks, and open flame. Avoid prolonged storage. Avoid electro-static discharge. Avoid contamination. Avoid prolonged exposure to extreme heat. Avoid extreme temperatures.

Substances to avoid: strong bases, strong acids, strong oxidizing agents.

Hazardous reactions: No hazardous reactions if stored and handled as prescribed/indicated.

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Decomposition products: Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11: TOXICOLOGICAL INFORMATION

For Chlormequat chloride tech

Oral: Acute oral LD₅₀ for male rats 966, female rats 807 mg/kg.

Skin and eye: Acute percutaneous LD₅₀ for rats >4000, rabbits >2000 mg/kg. Not irritating to skin and eyes. Not a skin sensitiser.

Inhalation: LC₅₀ (4 h) for rats >5.2 mg/l air.

SECTION 12: ECOLOGICAL INFORMATION

For Chlormequat chloride tech

Birds: Acute oral LD₅₀ for Japanese quail 441, pheasants 261, chickens 920 mg/kg.

Fish LC₅₀ (96 h) for mirror carp and rainbow trout >100 mg/l.

Daphnia: LC₅₀ (48 h) 31.7 mg/l.

Algae: EC₅₀ (72 h) for *Pseudokirchneriella subcapitata* >100 mg/l; EC₅₀ (cell volume) for *Chlorella fusca* 5656 mg/l.

Bees: Non-toxic to bees.

Worms: LC₅₀ (14 d) for *Eisenia foetida* 2111 mg/kg soil.

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SECTION 13: DISPOSAL CONSIDERATIONS

Pesticide disposal: Contaminated absorbents, surplus product, etc., should be burned in a high-temperature incinerator (> 1000 °C) with effluent gas scrubbing. Where no incinerator is available surplus product should be or diluted and buried in designated landfill. Never pour untreated waste or surplus products into public sewers or where there is any danger of run-off or seepage into water systems. Comply with local legislation applying to waste disposal.

Package product wastes: Emptied containers retain vapour and product residues. Observe all labelled safeguards until container is destroyed. Combustible containers should be disposed of in pesticide incinerators. Non-combustible containers must be triple rinsed with



water and then be punctured and transported to a scrap metal facility for recycling or disposal in approved landfill site. Comply with any local legislation applying to disposal.

SECTION 14: TRANSPORT INFORMATION

Not available. Do not transport with foodstuff.

SECTION 15: REGULATORY INFORMATION

Safety phrases:

- S 1 Keep locked up
- S 2 Keep out of reach of children
- S 16 Keep away from sources of ignition – No smoking
- S 23 Do not breathe vapour/spray
- S 24/25 Avoid contact with skin and eyes
- S 28 After contact with skin, wash immediately with plenty of water and non-abrasive soap.
- S 36/37/39 Wear protective clothing gloves and eye/face protection.
- S 45 In case of accident or if you feel unwell, seek medical advice immediately

SECTION 16: OTHER INFORMATION

The information contained in the Safety Data sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as a warranty or as a specification. The information relates only to the product specified and may not be suitable for combinations with other materials or in processes other than those specifically described herein. Buyer assumes all responsibility for safety and use not in accordance with the product label instructions.

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