

SAFETY DATA SHEET

MULTIQUAT NO. 455
Product ID: FP0455
Revised: 06-27-2018
Replaces: 09-13-2013

1. IDENTIFICATION

Product Identifier: MULTIQUAT NO. 455
Other Identifiers: N.A.
CAS Number: MIXTURE
Recommended Use: Registered sanitizer, disinfectant and virucide for use in industrial food handling and processing areas.
Restrictions on Use: No data available.

Hydrite Chemical Co.
17385 Golf Parkway
Brookfield, WI 53045
(262) 792-1450

EMERGENCY RESPONSE NUMBERS:
24 Hour Emergency #: (414) 277-1311
CHEMTREC Emergency #: (800) 424-9300

2. HAZARD(S) IDENTIFICATION

GHS Classification(s): Skin Corrosion/Irritation Category 1C
Serious Eye Damage/Eye Irritation Category 1
Hazardous to the aquatic environment - Acute Category 2
Hazardous to the aquatic environment - Chronic Category 2

GHS Label Elements:

GHS Hazard Symbols:



Signal Word: Danger
Hazard Statements: Causes severe skin burns and eye damage.
Toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

Precautionary Statements:

Prevention: Do not breathe dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.

Response: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER or doctor/physician.
Specific treatment (see First Aid on SDS or on this label).
Wash contaminated clothing before reuse.
Collect spillage.

Storage: Store in a secure manner.

Disposal:

Disposal: Dispose of in accordance with local, regional and international regulations.

Hazards Not Otherwise Classified: Do not use or store near heat or open flame.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances/Mixtures:

<u>Chemical or Common Name/Synonyms</u>	<u>CAS Number</u>	<u>% by Wt.</u>
Alkyl(50%C14,40%C12,10%C16) dimethyl benzyl ammonium chloride	68424-85-1	3.00 %
Octyl decyl dimethyl ammonium chloride	32426-11-2	2.30 %
Ethyl Alcohol	64-17-5	1.31 %
Didecyl dimethyl ammonium chloride	7173-51-5	1.10 %
Diocetyl dimethyl ammonium chloride	5538-94-3	1.10 %

Note: Any chemical identity and/or exact percentage not expressly stated is being withheld as a trade secret or is due to batch variation.

4. FIRST-AID MEASURES

Description of Necessary Measures:

Eye Contact: If in eyes: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention.

Skin Contact: If on skin: Flush skin with plenty of water while removing contaminated clothing and shoes. Do not reuse clothing or shoes until cleaned. If irritation develops or persists, get medical attention. Wash with soap and water.

Inhalation: If inhaled: Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

Ingestion: If swallowed: Call a physician immediately. DO NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

Most Important Symptoms/Effects, Acute and Delayed:

Eye Contact: CORROSIVE-Causes severe irritation and burns. May cause: permanent eye damage. blindness.

Skin Contact: May be corrosive to the skin. Severe irritation and burns may result. Brief contact may cause: irritation. defatting.

Skin Absorption: No absorption hazard expected under normal use.

Inhalation: May cause moderate to severe irritation. Vapors or mists may irritate: throat. respiratory tract. High vapor concentrations may cause: central nervous system effects. Symptoms may include: headache. dizziness. drowsiness.

Ingestion: May cause mild to severe irritation. May cause: gastrointestinal irritation. nausea. vomiting. diarrhea. death.

Indication of Immediate Medical Attention and Special Treatment Needed: There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Water. Water fog. Dry chemical. Carbon dioxide. Alcohol foam.

Specific Hazards Arising from the Chemical:

Fire and Explosion Hazards: Material will not ignite or burn.

Hazardous Combustion Products: Irritating and/or toxic gases.

Special Protective Equipment and Precautions for Fire-Fighters: Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers and disperse vapors. If container is not properly cooled, it can rupture in the heat of a fire.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, Emergency Procedures:

Methods and Materials for Containment and Clean Up: Shut off source of leak if safe to do so. Contain spill, place into drums for proper disposal. Soak up residue with non-flammable absorbent material. DO NOT use sawdust or other cellulose-type material. Place in non-leaking containers for immediate disposal. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs.

7. HANDLING AND STORAGE

Precautions for Safe Handling: Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling. Empty containers retain product residue (vapor, dust, or liquid) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other source of ignition. They may explode and cause injury or death.

Conditions for Safe Storage, Including any Incompatibilities: Store in a cool, well ventilated area, out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA Exposure Guidelines:

<u>Component</u>	<u>Limits</u>
Ethyl Alcohol	1000 ppm TWA; 1900 mg/m ³ TWA

ACGIH Exposure Guidelines:

<u>Component</u>	<u>Limits</u>
Ethyl Alcohol	1000 ppm STEL

Engineering Controls: General room ventilation and local exhaust are required. Maintain adequate ventilation. Do not use in closed or confined spaces. Avoid creating dust or mist. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly.

Individual Protection Measures:

Eye/Face Protection: Wear safety glasses with side shields while handling this product. Wear additional eye protection such as chemical safety goggles and/or face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material.

Skin Protection: Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Impervious. Chemical-resistant. Neoprene.

Respiratory Protection: Respiratory protection may be required to avoid overexposure when handling this product. If exposure limits are exceeded, wear: NIOSH-Approved respirator. NIOSH-Approved self-contained breathing apparatus. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

Other Protective Equipment: Eye-wash station. Safety shower. Rubber apron. Chemical safety shoes. Rubber boots. Impervious clothing. Protective clothing.

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General Hygiene Conditions: Wash with soap and water before meal times and at the end of each work shift. Good manufacturing practices require gross amounts of any chemical be removed from skin as soon as practical, especially before eating or smoking.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.
Color: Clear. Colorless.
Odor: No odor.
Odor Threshold: N.D.
pH: 8 (as is)
Freezing Point (deg. F): N.D.
Melting Point (deg. F): N.D.
Initial Boiling Point or Boiling Range: N.D.
Flash Point: None when heated to 100 Deg. C
Flash Point Method: COC.
Evaporation Rate (nBuAc = 1): N.D.
Flammability (solid, gas): N.D.
Lower Explosion Limit: N.A.
Upper Explosion Limit: N.A.
Vapor Pressure (mm Hg): N.D.
Vapor Density (air=1): N.D.
Specific Gravity or Relative Density: 0.990 @ 25C
Solubility in Water: Complete
Partition Coefficient (n-octanol/water): N.D.
Autoignition Temperature: No Data
Decomposition Temperature: N.D.
Viscosity: N.D.
% Volatile (wt%): ~ 93
VOC (wt%): 0.75-1.5
VOC (lbs/gal): 0.06-0.12
Fire Point: N.D.

10. STABILITY AND REACTIVITY

Reactivity: No data available.
Chemical Stability: Stable under normal conditions.
Possibility of Hazardous Reactions: Hazardous polymerization will not occur under normal conditions.
Conditions to Avoid: Avoid all forms of contamination.
Incompatible Materials: Oxidizing agents. Strong inorganic acids. Alkali metals.
Hazardous Decomposition Products: Carbon monoxide. Carbon dioxide.

11. TOXICOLOGICAL INFORMATION

Routes of Exposure: Eyes. Skin. Inhalation. Ingestion. Absorption.
Symptoms/Effects: Acute, Delayed and Chronic:
Eye Contact: CORROSIVE-Causes severe irritation and burns. May cause: permanent eye damage. blindness.
Skin Contact: May be corrosive to the skin. Severe irritation and burns may result. Brief contact may cause: irritation. defatting.
Skin Absorption: No absorption hazard expected under normal use.

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Inhalation: May cause moderate to severe irritation. Vapors or mists may irritate: throat. respiratory tract. High vapor concentrations may cause: central nervous system effects. Symptoms may include: headache. dizziness. drowsiness.

Ingestion: May cause mild to severe irritation. May cause: gastrointestinal irritation. nausea. vomiting. diarrhea. death.

Numerical Measures of Toxicity:

Component	Oral LD50	Dermal LD50	Inhalation LC50
Alkyl(50%C14,40%C12,10%C16) dimethyl benzyl ammonium chloride	Rat: 426 mg/kg	No Data	No Data
Octyl decyl dimethyl ammonium chloride	Rat: 238 mg/kg	Rabbit: 3342 mg/kg	4H Rat: 0.1 mg/L
Ethyl Alcohol	Rat: 7060 mg/kg	No Data	4H Rat: 124.7 mg/L
Didecyl dimethyl ammonium chloride	Rat: 84 mg/kg	Rabbit: 3342 mg/kg	4H Rat: 0.1 mg/L
Dioctyl dimethyl ammonium chloride	Rat: 238 mg/kg	Rabbit: 3342 mg/kg	4H Rat: 0.1 mg/L

Acute Toxicity Estimate (ATE):

Oral: 2890 mg/kg

Cancer Information:

This product does not contain 0.1% or more of the known or potential carcinogens listed in NTP, IARC, or OSHA.

Medical Conditions Aggravated by Exposure to Product: No data available.

Other: None known.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information: Analysis determined that the P. promelas 96-hour LC50 of Multiquat No. 455 was 12.11 mg/L, the C. dubia 48-hour LC50 was 0.59 mg/L, and D. magna 48-hour LC50 was 0.44 mg/L.

Chemical Fate Information: No data available.

13. DISPOSAL CONSIDERATIONS

Hazardous Waste Number: N.A.

Disposal Method: Dispose of in accordance with all local, state and federal regulations. Chemical additions to, processing of, or otherwise altering this material may make this waste management information incomplete, inaccurate, or otherwise inappropriate. Furthermore, state and local waste disposal requirements may be more restrictive or otherwise different from federal laws and regulations. DO NOT pressurize, cut, weld, solder, drill, grind or expose empty containers to heat, flame, sparks or other sources of ignition. Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION

DOT (Department of Transportation):

Identification Number: UN1903
Proper Shipping Name: Disinfectants, Liquid, Corrosive N.O.S. (Quaternary Ammonium Compound)
Hazard Class: 8
Packing Group: III
Label Required: CORROSIVE

15. REGULATORY INFORMATION

TSCA Inventory Status: All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

SARA Title III Section 311/312 Category Hazards: Please see Section 2 of this SDS.

Regulated Components:	CAS	CERCLA	SARA	SARA	U.S.	WI	Prop
Component	Number	RQ	EHS	313	HAP	HAP	65
Ethyl Alcohol	64-17-5	No	No	No	No	No	Yes*

Note: *Ethyl alcohol in alcoholic beverages is listed.

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 workplace labels of non-pesticide chemicals.

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

DANGER. Corrosive. Causes irreversible eye damage and skin burns. Harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing spray mist. Do not get in eyes, on skin or on clothing. Wear goggles or face shield and rubber gloves and protective clothing when handling. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove contaminated clothing and wash clothing before reuse.

ENVIRONMENTAL HAZARD

This product is toxic to fish and aquatic invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product into sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

16. OTHER INFORMATION

Hazard Rating System

Health: 3
Flammability: 0
Reactivity: 0
* = Chronic Health Hazard

NFPA Rating System

Health: 3
Flammability: 0
Reactivity: 0
Special Hazard: None

SDS Abbreviations

N.A. = Not Applicable
N.D. = Not Determined
HAP = Hazardous Air Pollutant
VOC = Volatile Organic Compound
C = Ceiling Limit
N.E./Not Estab. = Not Established

SDS Prepared by: JAK

Reason for Revision: Changes made throughout the SDS.

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The data in this Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which HYDRITE CHEMICAL CO. assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.