SAFETY DATA SHEET

MULTIQUAT NO. 455 Product ID: FP045504 Revised: 09-13-2013 Replaces: 01-24-2012

1. IDENTIFICATION

Product Name: MULTIQUAT NO. 455

Synonyms: N.A.

CAS Number: MIXTURE

Recommended Use: No data available. **Restrictions on Use:** No data available.

Hydrite Chemical Co. 300 N. Patrick Blvd. Brookfield. WI 53008-0948

(262) 792-1450

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

2. HAZARD(S) IDENTIFICATION





Signal Word: Danger

GHS Classification: Serious Eye Damage/Eye Irritation Category 1

Skin Corrosion/Irritation Category 2

Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3

Hazard Statements: Causes skin irritation.

Causes serious eye damage. May cause respiratory irritation.

Precautionary Statements:

Prevention: Avoid breathing dust, gas, mist, vapors or spray.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear gloves, eye and face protection and protective clothing.

Response: IF ON SKIN: Wash with plenty of soap and 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). If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash before reuse.

Storage: Store in a well-ventilated place. Keep container tightly closed.

Store in a secure manner.

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

Component	CAS Number	<u>% by Wt.</u>
Alkyl(50%C14,40%C12,10%C16) dimethyl benzyl ammonium chloride	68424-85-1	< 5 %
Octyl decyl dimethyl ammonium chloride	32426-11-2	< 5 %
Ethyl Alcohol	64-17-5	< 5 %
Didecyl dimethyl ammonium chloride	7173-51-5	< 2 %
Dioctyl dimethyl ammonium chloride	5538-94-3	< 2 %

4. FIRST-AID MEASURES

Eye Contact: 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. Remove contact lenses after the first 5 minutes and continue flushing.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Do not reuse clothing and shoes until cleaned. Wash with soap and water.

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

Ingestion: If fully conscious, drink a quart of water. DO NOT induce vomiting. CALL A PHYSICIAN IMMEDIATELY. If unconscious or in convulsions, take immediately to a hospital or a physician. NEVER induce vomiting or give anything by mouth to an unconscious victim. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Have person sip a glass of water if able to swallow.

Note to Physicians:

Probable mucosal damage may contraindicate the use of gastric lavage.

Most Important Symptoms/Effects:

Eye Contact: CORROSIVE-Causes severe irritation and burns. Skin Contact: CORROSIVE-Causes severe irritation and burns.

Inhalation: May be corrosive to the respiratory tract. Severe irritation and burns may result.

May be corrosive to the gastrointestinal tract. Severe irritation and burns may result.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Dry chemical. Foam. Carbon dioxide. Water fog. DO NOT USE: Direct water stream.

Fire Fighting Methods: 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. Do not use direct water stream. May spread fire.

Fire and Explosion Hazards: FLAMMABLE LIQUID. Vapors are heavier than air. Vapors may settle in low or confined areas, or travel long distances along the ground or surface to an ignition source where they may ignite, flashback, or explode. Keep away from heat, sparks, flames or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment). PROCESS HAZARD: Sudden release of hot organic chemical vapors or mists from process equipment operating at elevated temperature and pressure, or sudden ingress of air into hot equipment under a vacuum, may result in ignitions without the presence of obvious ignition sources. Published "autoignition" or "ignition" temperature values cannot be treated as safe operating temperatures in chemical processes without analysis of the actual process conditions. Any use of this product in elevated-temperature processes should be thoroughly evaluated to establish and maintain safe operating conditions. May form explosive mixtures in air. Combustion products are toxic. Solvent vapors can travel to an ignition source and flash back.

Hazardous Combustion Products: Irritating and/or toxic gases.

6. ACCIDENTAL RELEASE MEASURES

Spill Clean-Up Procedures: CORROSIVE MATERIAL. Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit. Keep out of low areas. 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. Place in non-leaking containers for immediate disposal. Flush remaining area with water to remove trace residue and dispose of properly. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs. Prevent entry into basements, low areas, or confined areas. A vapor suppressing foam may be used to reduce vapors. Water spray may reduce vapor, but may not prevent ignition in closed spaces. Use non-sparking tools and equipment. CAUTION: Spilled material may be slippery. Do not touch or walk through spilled material.

7. HANDLING AND STORAGE

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. Avoid dust or mist formation. Ground all equipment and containers before opening to prevent accumulation of static charge. Ground lines and equipment used during transfer to reduce the possibility of static spark-initiated fire or explosion. Use non-sparking tools.

Storage: CORROSIVE MATERIAL. 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. Do not freeze. Do not store near heat or open flames. Static electricity may accumulate and create a fire hazard. Ground fixed equipment. Bond and ground transfer containers and equipment. See Section 10 for incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA Exposure Guidelines:

<u>Component</u> <u>Limits</u>

Ethyl Alcohol 1000 ppm TWA; 1900 mg/m3 TWA

ACGIH Exposure Guidelines:

Component Limits

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.

Eye/Face Protection: Wear chemical safety goggles while handling this product. Wear additional eye protection such as a 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. Rubber. Neoprene.

Respiratory Protection: Respiratory protection may be required to avoid overexposure when handling this product. If exposure limits are exceeded, wear: NIOSH-Approved air-purifying respirator with: Organic vapor cartridge. 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. 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: 8.00 (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.

Contact with strong oxidizing agents may cause fire.

Conditions to Avoid: Avoid contact with heat, sparks, electric arcs, other hot surfaces, and open flames. Avoid other ignition sources. Keep away from strong oxidizing agents.

Incompatible Materials: Strong oxidizing agents. Reducing agents.

Hazardous Decomposition Products: Carbon monoxide. Carbon dioxide. Nitrogen oxides. Ammonia. Low molecular weight hydrocarbons.

11. TOXICOLOGICAL INFORMATION

ComponentOral LD50Dermal LD50Inhalation LC50Ethyl AlcoholNo DataNo Data4H Rat: 124.7 mg/L

Routes of Exposure: Eyes. Skin. Inhalation. Ingestion. Absorption.

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

Skin Contact: CORROSIVE-Causes severe irritation and burns. Brief contact may cause: irritation. defatting.

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Skin Absorption: May be harmful if absorbed through skin.

Inhalation: May be corrosive to the respiratory tract. Severe irritation and burns may result. 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 be corrosive to the gastrointestinal tract. Severe irritation and burns may result. May cause: gastrointestinal irritation. nausea. vomiting. diarrhea. death.

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

Other: None known.

Cancer Information:

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

12. ECOLOGICAL INFORMATION

Ecotoxicological Information: No data available. Very toxic to aquatic organisms.

Chemical Fate Information: No data available.

13. DISPOSAL CONSIDERATIONS

Hazardous Waste Number: N.A.

Disposal Method: Dispose of in a permitted hazardous waste management facility following 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. Since emptied containers retain product residue, follow label warnings even after container is emptied. DO NOT pressurize, cut, weld, solder, drill, grind or expose empty containers to heat, flame, sparks or other sources of ignition.

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: This product or all components of this product are listed on the EPA/TSCA Inventory of Chemical Substances.

SARA Title III Section 311/312 Category Hazards:

Immediate (Acute)	<u>Delayed (Chronic)</u>		Fire Hazard	Pressure Release			<u>Reactive</u>	
Yes	No		No		No		No	
Regulated Componer Component Ethyl Alcohol	nts:	<u>CAS</u> <u>Number</u> 64-17-5	CERCLA RQ No	SARA EHS No	<u>SARA</u> <u>313</u> No	<u>U.S.</u> <u>HAP</u> No	<u>WI</u> <u>HAP</u> No	<u>Prop</u> <u>65</u> Yes

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.

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HAZARDS TO HUMANS AND DOMESTIC ANIMALS

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 HAZARDS

This pesticide 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.

PHYSICAL OR CHEMICAL HAZARDS

Do not use or store near heat or open flame. Do not mix with oxidizers, anionic soaps and detergents.

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

MSDS 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

MSDS Prepared by: JAK

Reason for Revision: New format.

Revised: 09-13-2013 **Replaces:** 01-24-2012

The data in this Material 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.

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