SAFETY DATA SHEET

SENTINEL NO. 473
Product ID: FP0473
Revised: 12-27-2021
Replaces: 12-20-2016

1. IDENTIFICATION

Product Identifier:	SENTINEL NO. 473
Other Identifiers:	L0002925A
CAS Number:	Mixture
Recommended Use:	No data available.
Restrictions on Use:	No data available.

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

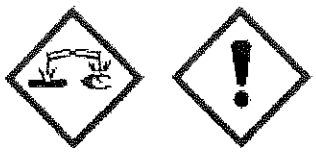
EMERGENCY RESPONSE NUMBERS:
24 Hour Emergency #: (414) 277-1311
CHEMTREC Emergency #: (800) 424-9300

2. HAZARD(S) IDENTIFICATION

GHS Classification(s): Skin Corrosion/Irritation Category 1B
Serious Eye Damage/Eye Irritation Category 1
Acute Toxicity - Dermal Category 4
Acute Toxicity - Oral Category 4

GHS Label Elements:

GHS Hazard Symbols:



Signal Word: Danger

Hazard Statements: Harmful if swallowed or in contact with skin.
Causes severe skin burns and eye damage.

Precautionary Statements:

Prevention: Do not breathe dust/fume/gas/mist/vapours/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
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.

Storage: Store in a secure manner.

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

Hazards Not Otherwise Classified: None known.

Percentage of Components with Unknown Acute Toxicity:
Inhalation Vapor: 12.1 %
Inhalation Dust/Mist: 14.5 %

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances/Mixtures:

Chemical or Common Name/Synonyms	CAS Number	% by Wt.
Phosphoric Acid	7664-38-2	< 35 %
Alkyl(50%C14,40%C12,10%C16) dimethyl benzyl ammonium chloride	68424-85-1	< 10 %
Octyl decyl dimethyl ammonium chloride	32426-11-2	< 5 %
Alcohols, C12-14 secondary, ethoxylated	84133-50-6	< 5 %
Ethyl Alcohol	64-17-5	< 3 %
Didecyl dimethyl ammonium chloride	7173-51-5	< 3 %
Dioctyl dimethyl ammonium chloride	5538-94-3	< 3 %

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. Remove contact lens if easy to do.

Skin Contact: If on skin: 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. Do not apply oils or ointments unless ordered by the physician. 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. DO NOT use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Keep warm and quiet.

Ingestion: If swallowed: 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.

Most Important Symptoms/Effects, Acute and Delayed:

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

Skin Contact: CORROSIVE-Causes severe irritation and burns. Contact may cause: dermatitis (inflammation of the skin). ulceration. permanent skin damage.

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 or burn: respiratory tract. nose. mouth. throat. May cause: persistent coughing. pulmonary edema. chemical pneumonitis. permanent damage. High vapor concentrations may cause: central nervous system effects.

Ingestion: CORROSIVE-Causes severe irritation and burns. May irritate or burn: mouth. throat. stomach. esophagus. May cause: abdominal pain. chest pain. nausea. vomiting. diarrhea. seizures. hemorrhaging. permanent damage. Aspiration into the lungs may occur during ingestion or vomiting, resulting in severe pulmonary injury. May be fatal if swallowed.

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: For fires in area use appropriate media. For example: Water spray. Dry chemical. Carbon dioxide. Foam.

Specific Hazards Arising from the Chemical:

Fire and Explosion Hazards: May react with certain metals to form explosive/flammable hydrogen gas. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

Hazardous Combustion Products: Phosphorous oxides. Phosphine. Toxic vapors. Corrosive vapors. Carbon monoxide. Carbon dioxide. 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. Product generates heat upon addition of water, with possible spattering. Run-off from fire control may cause pollution.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, Emergency 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.

Methods and Materials for Containment and Clean Up: Contain spill, place into drums for proper disposal. Soak up residue with inert absorbent material. Place in non-leaking containers for immediate disposal. Flush remaining area with water and neutralize with Soda Ash, Lime or Limestone and dispose of properly. Adequate ventilation is required if soda ash is used, because of the consequent release of carbon dioxide gas. 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. CORROSIVE MATERIAL. Contact with water may cause violent reaction with evolution of heat. To dilute: Add product slowly to lukewarm water; not water to product. Mixing with strong bases can cause high heat of reaction and generate steam.

Conditions for Safe Storage, Including any Incompatibilities: 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. May react with certain metals to form explosive/flammable hydrogen gas.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA Exposure Guidelines:

Component	Limits
Phosphoric Acid	1 mg/m3 TWA
Ethyl Alcohol	1000 ppm TWA; 1900 mg/m3 TWA

ACGIH Exposure Guidelines:

Component	Limits
Phosphoric Acid	1 mg/m3 TWA; 3 mg/m3 STEL
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 chemical safety goggles and a full face shield while handling this product. Do not wear contact lenses.

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

Respiratory Protection: Respiratory protection must be worn if ventilation does not eliminate symptoms or keep levels below recommended exposure limits. If exposure limits are exceeded, wear: NIOSH-Approved respirator. 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. Launder contaminated clothing and clean protective equipment before reuse. Full body suit.

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. Food, beverages, and tobacco products should not be carried, stored or consumed where this material is in use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.
Color: Clear. Colorless to light pink.
Odor: Acidic odor.
Odor Threshold: N.D.
pH: 1 (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 to 212 °F
Flash Point Method: COC.
Evaporation Rate (nBuAc = 1): N.D.
Flammability (solid, gas): N.D.
Lower Explosion Limit: N.D.
Upper Explosion Limit: N.D.
Vapor Pressure (mm Hg): N.D.
Vapor Density (air=1): N.D.
Specific Gravity or Relative Density: 1.163 @ 25C
Solubility in Water: N.D.
Partition Coefficient (n-octanol/water): N.D.
Autoignition Temperature: No Data
Decomposition Temperature: N.D.
Viscosity: N.D.
% Volatile (wt%): N.D.
VOC (wt%): N.D.
VOC (lbs/gal): N.D.
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. May react with certain metals to form explosive/flammable hydrogen gas. Mixing with strong bases can cause high heat of reaction and generate steam. Phosphoric acid forms flammable gases with sulfides, mercaptans, cyanides and aldehydes. Phosphoric acid forms toxic fumes with cyanides, sulfides, fluorides, organic peroxides, and halogenated organics. Phosphoric acid mixtures with nitromethane are explosive.

Conditions to Avoid: Contact with water may cause violent reaction with evolution of heat. To dilute: Add product slowly to lukewarm water; not water to product. Avoid high temperatures. Avoid contact with heat, sparks, electric arcs, other hot surfaces, and open flames. Avoid other ignition sources.

Incompatible Materials: Metals. Strong oxidizing agents. Strong reducing agents. Sulfides. Sulfites. Bases. Fluorine. Sulfur trioxide. Phosphorous pentoxide. Sodium tetrahydroborate. Aldehydes. Amines. Amides. Alcohols. Azo-compounds. Carbamates. Esters. Caustics. Phenols. Cresols. Ketones. Organophosphates. Epoxides. Explosives. Combustible materials. Unsaturated halides. Organic peroxides. Mercaptans. Cyanides. Nitromethane. Glycols. Fluorides. Halogenated organics. Sulfur. Aluminum. Copper. Mild steel. Brass. Bronze. Steel. Strong bases. Strong acids. Strong inorganic acids. Alkali metals.

Hazardous Decomposition Products: Phosphorous oxides. Phosphine. Reactions with other materials may liberate toxic and/or explosive gases. 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: ulcerations. conjunctivitis. permanent eye damage. blindness.

Skin Contact: CORROSIVE-Causes severe irritation and burns. Contact may cause: dermatitis (inflammation of the skin). ulceration. permanent skin damage.

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 or burn: respiratory tract. nose. mouth. throat. May cause: persistent coughing. pulmonary edema. chemical pneumonitis. permanent damage. High vapor concentrations may cause: central nervous system effects.

Ingestion: CORROSIVE-Causes severe irritation and burns. May irritate or burn: mouth. throat. stomach. esophagus. May cause: abdominal pain. chest pain. nausea. vomiting. diarrhea. seizures. hemorrhaging. permanent damage. Aspiration into the lungs may occur during ingestion or vomiting, resulting in severe pulmonary injury. May be fatal if swallowed.

Numerical Measures of Toxicity:

Component	Oral LD50	Dermal LD50	Inhalation LC50
Phosphoric Acid	No Data	Rabbit: 2740 mg/kg	No Data
Alkyl(50%C14,40%C12,10%C 16) dimethyl benzyl ammonium chloride	Rat: 426 mg/kg	No Data	No Data
Secondary Alcohol Ethoxylate	Rat: 2100 mg/kg	No Data	No Data
Ethyl Alcohol	Rat: 7060 mg/kg	No Data	No Data
Didecyl dimethyl ammonium chloride	Rat: 84 mg/kg	No Data	No Data

Acute Toxicity Estimate (ATE):
Inhalation Vapor: 398.6899 mg/L

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: Eye disorders. Skin disorders. Impaired respiratory function. Lung disorders. Dermatitis.

Other: None known.

Phosphoric Acid has a low vapor pressure at room temperature and is not expected to present a significant inhalation hazard under ambient conditions. Phosphoric Acid can, however, be irritating to the respiratory tract if inhaled as a mist or if the material is vaporized. The American Conference of Governmental Industrial Hygienists (ACGIH) has established a Threshold Limit Value (TLV) for Phosphoric Acid. For further information on this material, please refer to the current edition of the Documentation of The Threshold Limit Values and Biological Exposure Indices.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information: No data available.

Chemical Fate Information: No data available.

13. DISPOSAL CONSIDERATIONS

Hazardous Waste Number: D002

Disposal Method: Dispose of in a permitted hazardous waste management facility following all local, state and federal 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:	II
Label Required:	CORROSIVE
Reportable Quantity (RQ):	5000# (Phosphoric Acid)

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:

Immediate (Acute)	Delayed (Chronic)	Fire Hazard	Pressure Release	Reactive
Yes	No	No	No	No

Regulated Components: Component	CAS Number	CERCLA RQ	SARA EHS	SARA 313	U.S. HAP	WI HAP	Prop 65
Phosphoric Acid	7664-38-2	Yes	No	No	No	Yes	No
Ethyl Alcohol	64-17-5	No	No	No	No	No	Yes*

***Prop 65 - May Contain the Following Trace Components:**
Benzyl Chloride

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. KEEP OUT OF REACH OF CHILDREN. Corrosive. Causes irreversible eye damage and skin burns. Harmful if swallowed or absorbed through skin. Harmful if inhaled. Avoid breathing spray mist. Do not get into 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 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.

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: Correction made to the flash point in section 9.

Revised: 12-27-2021
Replaces: 12-20-2016

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.