

# SAFETY DATA SHEET

HYDRISHIELD PA 22 HP  
Product ID: FP4700  
Revised: 08-18-2022  
Replaces: 02-21-2019

## 1. IDENTIFICATION

**Product Identifier Used on the Label:** HYDRISHIELD PA 22 HP

**Other Identifiers:** R36459  
**Product ID:** 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  
Oxidizing Liquid Category 2  
Organic Peroxide Type F  
Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3  
Flammable Liquid Category 4

**GHS Label Elements:**

**GHS Hazard Symbols:**



**Signal Word:** Danger

**Hazard Statements:** Combustible Liquid.  
Heating may cause a fire.  
May intensify fire; oxidizer.  
Causes severe skin burns and eye damage.  
May cause respiratory irritation.

**Precautionary Statements:**

**Prevention:** Keep away from heat, sparks, open flames and hot surfaces. – No smoking.  
Keep away from clothing and other combustible materials.  
Take any precaution to avoid mixing with combustibles.  
Keep only in original container.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Wash thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Wear protective gloves/protective clothing/eye protection/face protection.  
Protect from sunlight.

**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.  
In case of fire: Use water only, water fog, water spray, water (flood with water) to extinguish.

**Storage:** Store in a well-ventilated place. Keep container tightly closed.  
Store in a well-ventilated place. Keep cool.  
Store in a secure manner.  
Protect from sunlight.  
Store at temperatures not exceeding 30 °C/ 86 °F. Keep cool.  
Store away from other materials.

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

**Hazards not otherwise classified:** None known.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Substances/Mixtures:

<u>Chemical or Common Name/Synonyms</u>	<u>CAS Number</u>	<u>% by Wt.</u>
Acetic Acid	64-19-7	< 30 %
Peracetic Acid	79-21-0	< 30 %
Hydrogen Peroxide	7722-84-1	< 20 %
Sulfuric Acid	7664-93-9	< 5 %

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. Wash with soap and water. Discard shoes if contaminated.

**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. 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. Rinse mouth with fresh water. Give 1-2 glasses of water to drink. Keep warm and quiet.

#### Most Important Symptoms/Effects, Acute and Delayed:

**Eye Contact:** CORROSIVE-Causes severe irritation and burns. May cause: corneal damage. permanent eye damage. blindness. Effects may be delayed.

**Skin Contact:** CORROSIVE-Causes severe irritation and burns. Contact may cause: redness. discoloration. itching. swelling. blistering. burning. skin damage. Contact with concentrated liquid for a short period of time may cause a temporary whitening or bleaching of the skin.

**Skin Absorption:** May be harmful if absorbed through skin.

**Inhalation:** CORROSIVE-Causes severe irritation and burns. May cause: coughing, hoarseness, chest pain, difficulty breathing, wheezing, tightness of the chest, shortness of breath, headache. Chronic exposure may cause: tooth decay, lung damage. Repeated exposure may cause: inflammation of the respiratory tract. High concentrations of vapor or mist may cause severe irritation of the: nose, throat, respiratory tract. Excessive exposure may cause: pulmonary edema, death. Effects may be delayed.

**Ingestion:** CORROSIVE-Causes severe irritation and burns. May cause burns to the: mouth, throat, esophagus, stomach. May cause: gastrointestinal irritation, nausea, vomiting, diarrhea, ulcerations, burns, edema (fluid in lungs), death. The rapid releasing of oxygen can cause distension and bleeding of the mucosa in the stomach and lead to severe damage of the intestinal organs, especially in the event of greater intake of the product.

**Indication of Immediate Medical Attention and Special Treatment Needed:** Exposure to material may cause delayed lung injury resulting in pulmonary edema and pneumonitis. Exposed individuals should be monitored for 72 hours after exposure for the onset of delayed respiratory symptoms. Hydrogen peroxide is a strong oxidant. Direct contact with the eye is likely to cause corneal damage, especially if not washed immediately. Careful ophthalmologic evaluation is recommended and the possibility of local corticosteroid therapy should be considered. Because of the likelihood of corrosive effects on the gastrointestinal tract after ingestion and the unlikelihood of systemic effects, attempts at evacuating the stomach via emesis induction or gastric lavage should be avoided. There is a remote possibility, however, that a nasogastric or orogastric tube may be required for the reduction of severe distension due to gas formation.

## **5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media:** Water only. Water spray. Water fog. Water (flood with water). DO NOT USE: Organic compounds.

**Specific Hazards Arising from the Chemical:**

**Fire and Explosion Hazards:** STRONG OXIDIZER. Forms explosive mixtures with combustible, organic, or other easily oxidizable materials. These mixtures are easily ignited by friction or heat. Heated material can form flammable vapors with air. Heated material can form explosive vapors with air. Decomposition will release oxygen, which will intensify a fire. The rate of decomposition may exceed the vent capacity of storage containers and cause an explosion. Solutions above 65% are especially hazardous as they do not contain enough water to remove the heat of decomposition by evaporation. Will react with organic materials with evolution of heat and sulfur dioxide. Concentrated acid is a strong oxidizing agent. May cause ignition of combustible materials on contact with generation of sulfur dioxide fumes. Decomposes in a fire giving off irritant fumes.

**Hazardous Combustion Products:** Carbon dioxide. Carbon monoxide. Oxygen. Sulfur oxides.

**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. Move containers from fire area if possible without hazard. Run-off from fire control may cause pollution.

## **6. ACCIDENTAL RELEASE MEASURES**

**Personal Precautions, Protective Equipment, Emergency Procedures:** CORROSIVE MATERIAL. STRONG OXIDIZER. Eliminate all sources of ignition. 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:** Shut off source of leak if safe to do so. Never return spilled product into its original container. Never put spilled material into another container for disposal. Avoid contact with organic or combustible material which may cause fire or violent decomposition. Restrict access to area until completion of clean up. Prevent liquid from entering sewers or waterways. Stop or reduce leak if safe to do so. Dike with inert material (sand, earth). Collect into plastic containers for disposal. Ensure adequate decontamination of tools and equipment following clean up. 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. Combustible materials exposed to hydrogen peroxide should be immediately submerged in or rinsed with large amounts of water to ensure that all hydrogen peroxide is removed. Residual hydrogen peroxide that is allowed to dry (upon evaporation hydrogen peroxide can concentrate) on organic materials such as paper, fabrics, cotton, leather, wood, or other combustibles, can cause the material to ignite and result in a fire.

## **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.** Avoid contamination. Never return unused product to container. Contamination may cause decomposition and generation of oxygen gas which could result in high pressure and possibly container rupture. Use non-sparking tools and equipment. Utensils used for handling hydrogen peroxide should only be made of glass, stainless steel, aluminum or plastic.

**Conditions for Safe Storage, Including any Incompatibilities:** **CORROSIVE MATERIAL. STRONG OXIDIZER.** Store in a cool, well ventilated area away from all sources of ignition and 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. Avoid storage on wood floors or near wooden walls, etc.. Do not store on wooden pallets. Do not store near combustible materials. Store in a vented container. **DO NOT** contaminate water, food or feed by storage or disposal. Refer to the National Fire Protection Association (NFPA) Code for the Storage of Organic Peroxide Formulations.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **OSHA Exposure Guidelines:**

<b>Component</b>	<b>Limits</b>
Acetic Acid	10 ppm TWA; 25 mg/m <sup>3</sup> TWA
Hydrogen Peroxide	1 ppm TWA; 1.4 mg/m <sup>3</sup> TWA
Sulfuric Acid	1 mg/m <sup>3</sup> TWA

### **ACGIH Exposure Guidelines:**

<b>Component</b>	<b>Limits</b>
Acetic Acid	10 ppm TWA; 15 ppm STEL
Peracetic Acid	0.4 ppm STEL (inhalable fraction and vapor)
Hydrogen Peroxide	1 ppm TWA
Sulfuric Acid	0.2 mg/m <sup>3</sup> TWA (thoracic particulate matter)

**Appropriate 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. Wear a full-face respirator, if needed. Do not wear contact lenses.

**Skin Protection:** Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Butyl rubber. Neoprene. Polyvinyl chloride. Nitrile. Inspect regularly for leaks. Thoroughly rinse the outside of gloves with water prior to removal. Avoid cotton, wool and leather clothing and shoes.

**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. NIOSH-Approved self-contained breathing apparatus. **DO NOT** use any form of air-purifying respirator (APR) or filtering facepiece (AKA dust mask), especially those containing oxidizable sorbants such as activated carbon.

**HYDRISHIELD PA 22 HP**  
**Product ID: FP4700**

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. Impervious clothing. Full body suit. NOTE: As the water content of hydrogen peroxide evaporates, cotton, rayon, and wool fibers are particularly subject to spontaneous combustion. Where there is significant risk of sudden splash or spray, it is advised that an apron or rubber suit be worn. Any contaminated clothing, including gloves, shoes, aprons, coveralls, etc., should be removed immediately and thoroughly flushed with water to eliminate any traces of hydrogen peroxide before cleaning and reuse. Residual hydrogen peroxide, if allowed to dry on material such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in fire.

**General Hygiene Conditions:** Wash with soap and water before meal times and at the end of each work shift. Handle in accordance with good industrial hygiene and safety practice. 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.

**Odor:** Vinegar-like.

**Odor Threshold:** N.D.

**pH:** < 1

**Freezing Point (deg. F):** - 50

**Melting Point (deg. F):** N.D.

**Initial Boiling Point or Boiling Range:** N.A.

**Flash Point:** 153 °F

**Flash Point Method:** CCCFP. (ASTM D 6450)

**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:** 1.148 @ 25 °C

**Solubility in Water:** Complete

**Partition Coefficient (n-octanol/water):** N.D.

**Auto-ignition Temperature:** N.D.

**Decomposition Temperature:** N.D.

**Viscosity:** 5.76 cP

**% Volatile (wt%):** N.D.

**VOC (wt%):** N.D.

**VOC (lbs/gal):** N.D.

**Fire Point:** N.D.

## 10. STABILITY AND REACTIVITY

**Reactivity:** Bases, soft metals, reducing agents.

**Chemical Stability:** Stable under normal conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur under normal conditions. Contact with organic materials may cause fire and explosions. Contact with metals, metallic ions, alkalis, reducing agents and organic matter (such as alcohols or terpenes) may produce self-accelerated thermal decomposition. Attacks many metals.

**Conditions to Avoid (e.g., static discharge, shock, or vibration):** Avoid contact with heat, sparks, electric arcs, other hot surfaces, and open flames. Avoid other ignition sources. Avoid oxidizing conditions. Avoid elevated temperatures. Avoid exposure to light. UV-rays. pH variations. Excessive heat or contamination could cause product to become unstable.

**Incompatible Materials:** Amines. Styrene. Oxygen. Reducing agents. Alkalies. Combustible materials. Organics. Wood. Dust. Paper. Dirt. Decomposition catalysts. Metals. Metal salts. Metal ions. Copper or copper alloys. Galvanized iron. Metal Oxides. Acids. Salts. Leather. Heavy metals. Oxidizing agents. Strong acids. Bases. Alcohols. Nitric Acid. Sodium peroxide. Carbonates. Hydroxides. Phosphates. Corrosive to some metals. Acetaldehyde. Acetic Anhydride. Potassium tert-butoxide.

**Hazardous Decomposition Products:** Carbon dioxide. Carbon monoxide. Hydrogen sulfide gas. Sulfur compounds. Oxygen. Acetic acid. Material decomposes with the potential to produce a rupture of unvented closed containers. This material decomposes if contaminated, causing fire and possible explosions. Oxygen can be liberated at temperatures above ambient. Sulfur oxides. Sulfuric acid vapors. Hydrogen gas.

## **11. TOXICOLOGICAL INFORMATION**

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

**Symptoms/Effects: Acute, Delayed and Chronic:**

**Eye Contact:** CORROSIVE-Causes severe irritation and burns. May cause: corneal damage. permanent eye damage. blindness. Effects may be delayed.

**Skin Contact:** CORROSIVE-Causes severe irritation and burns. Contact may cause: redness. discoloration. itching. swelling. blistering. burning. skin damage. Contact with concentrated liquid for a short period of time may cause a temporary whitening or bleaching of the skin.

**Skin Absorption:** May be harmful if absorbed through skin.

**Inhalation:** CORROSIVE-Causes severe irritation and burns. May cause: coughing. hoarseness. chest pain. difficulty breathing. wheezing. tightness of the chest. shortness of breath. headache. Chronic exposure may cause: tooth decay. lung damage. Repeated exposure may cause: inflammation of the respiratory tract. High concentrations of vapor or mist may cause severe irritation of the: nose. throat. respiratory tract. Excessive exposure may cause: pulmonary edema. death. Effects may be delayed.

**Ingestion:** CORROSIVE-Causes severe irritation and burns. May cause burns to the: mouth. throat. esophagus. stomach. May cause: gastrointestinal irritation. nausea. vomiting. diarrhea. ulcerations. burns. edema (fluid in lungs). death. The rapid releasing of oxygen can cause distension and bleeding of the mucosa in the stomach and lead to severe damage of the intestinal organs, especially in the event of greater intake of the product.

**Numerical Measures of Toxicity:**

<b>Component</b>	<b>Oral LD50</b>	<b>Dermal LD50</b>	<b>Inhalation LC50</b>
Acetic Acid	Rat: 3310 mg/kg	Rabbit: 1060 mg/kg	4H Rat: 11.4 mg/L
Peracetic Acid	Rat: 1540 mg/kg	Rat: > 2000 mg/kg	4H Rat: 213 mg/m3
Hydrogen Peroxide	Rat: 1518 mg/kg	Rabbit: 9200 mg/kg	4H Rat: 186 mg/m3
Sulfuric Acid	Rat: 2140 mg/kg	No Data	4H Rat: 0.4 mg/L

**Acute Toxicity Estimates (ATE):**

**Oral:** 4050 mg/kg  
**Dermal:** 4327 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:** Eye disorders. Skin disorders. Respiratory system disorders. Mucous membranes diseases. Lung disorders.

**Other:** The International Agency for Research on Cancer (IARC) has concluded that occupational exposure to strong inorganic acid mists containing sulfuric acid is carcinogenic to man, causing cancer of the larynx (the

**HYDRISHIELD PA 22 HP**  
**Product ID: FP4700**

voice box). Although no direct link has been established between exposure to sulfuric acid itself, and cancer in man, exposure to any mist or aerosol during the use of this product should be avoided.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicological Information:** No data available.

**Chemical Fate Information:** No data available.

**13. DISPOSAL CONSIDERATIONS**

**Hazardous Waste Number:** Possibly: D002, D003

**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. TRANSPORTATION INFORMATION**

**DOT (Department of Transportation):**

**Identification Number:** UN3109  
**Proper Shipping Name:** ORGANIC PEROXIDE TYPE F, LIQUID (PEROXYACETIC ACID, TYPE F STABILIZED)  
**Hazard class:** 5.2 (8)  
**Label Required:** ORGANIC PEROXIDE; CORROSIVE  
**Reportable Quantity (RQ):** 5000# (Acetic Acid); 1000# (Sulfuric 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:** Please see Section 2 of this SDS.

<b>Regulated Components:</b>	<b>CAS</b>	<b>CERCLA</b>	<b>SARA</b>	<b>SARA</b>	<b>U.S.</b>	<b>WI</b>	<b>Prop</b>
<b>Component</b>	<b>Number</b>	<b>RQ</b>	<b>EHS</b>	<b>313</b>	<b>HAP</b>	<b>HAP</b>	<b>65</b>
Acetic Acid	64-19-7	Yes	No	No	No	Yes	No
Peracetic Acid	79-21-0	No	Yes	Yes	No	No	No
Hydrogen Peroxide	7722-84-1	No	Yes	No	No	Yes	No
Sulfuric Acid	7664-93-9	Yes	Yes	Yes	No	Yes	Yes

**\*Prop 65 - May Contain the Following Trace Components:**

This product may contain (a) chemical(s) subject to the reporting requirements of California's Proposition 65. Please contact your supplier if you need more information regarding this regulation.

**Note:** \* SARA RQ and TPQ are for Hydrogen Peroxide (Conc.> 52%). \* Sulfuric acid appears on the Section 313 List. However, the listing only applies to the aerosol forms of sulfuric acid.

**16. OTHER INFORMATION**

**Hazard Rating System**

**Health:** 3  
**Flammability:** 2  
**Reactivity:** 1

\* = Chronic Health Hazard

**NFPA Rating System**

**HYDRISHIELD PA 22 HP**

**Product ID: FP4700**

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**Health:** 3  
**Flammability:** 2  
**Reactivity:** 1  
**Special Hazard:** OX

**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:** ALF

**Reason for Revision:** New product.

**Revised:** 08-18-2022

**Replaces:** 02-21-2019

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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.**