SAFETY DATA SHEET

HYDRI-SAN NO. 468
Product ID: FP0468
Revised: 09-04-2013
Replaces: 01-07-2011

1. IDENTIFICATION

Product Name:	HYDRI-SAN NO. 468
Synonyms:	B-98054A
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:	Substance or mixture corrosive to metals Category 1 Skin Corrosion/Irritation Category 1B Serious Eye Damage/Eye Irritation Category 1 Carcinogenicity Category 1A Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3 Acute Toxicity - Inhalation Vapour Category 4
Hazard Statements:	May be corrosive to metals. Causes severe skin burns and eye damage. Harmful if inhaled. May cause respiratory irritation. May cause cancer.

Precautionary Statements:

Prevention:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep only in original container. Do not breathe dust, fume, 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. Use personal protective equipment as required.
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.
Absorb spillage to prevent material damage.

Storage: Store in a well-ventilated place. Keep container tightly closed.
Store in a secure manner.
Store in corrosive resistant container with a resistant inner liner.

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

Hazards Not Otherwise Classified: May react with certain metals to form explosive/flammable hydrogen gas. May react violently with water.

Percentage of Components with Unknown Acute Toxicity:
Inhalation Vapor: 10.6 %
Inhalation Dust/Mist: 10.6 %

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	% by Wt.
Phosphoric Acid	7664-38-2	< 50 %
C(10-16)-Alkylbenzenesulfonic Acid	68584-22-5	< 15 %
Sulfuric Acid	7664-93-9	< 0.5 %

4. FIRST-AID 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. Discard contaminated leather articles such as shoes and belt.

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: 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.

Note to Physicians:
Treatment is symptomatic and supportive. Following severe exposure medical follow-up should be monitored for at least 48 hours.

Most Important Symptoms/Effects:
Eye Contact: CORROSIVE-Causes severe irritation and burns.
Skin Contact: CORROSIVE-Causes severe irritation and burns.
Inhalation: CORROSIVE-Causes severe irritation and burns.
Ingestion: CORROSIVE-Causes severe irritation and burns.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Not flammable or combustible. For fires in area use appropriate media. For example: Water spray. Dry chemical. Carbon dioxide. Foam.

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 and disperse vapors. Product generates heat upon addition of water, with possible spattering. Run-off from fire control may cause pollution. Do not use direct water stream. May spread fire. Move containers from fire area if possible without hazard. Container may rupture from gas generation in a fire situation.

Fire and Explosion Hazards: This product may react with certain metals to produce flammable Hydrogen Gas. Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.

Hazardous Combustion Products: Phosphorous oxides. Phosphine. Toxic vapors. Carbon dioxide. Carbon monoxide. Aldehydes. Ketones. Sulfur dioxide. Sulfur oxides. Sulfuric acid.

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. 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. CAUTION: Spilled material may be slippery. Do not touch or walk through spilled material. Prevent entry into basements, low areas, or confined areas.

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. CORROSIVE MATERIAL. Avoid dust or mist formation.

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. May react with certain metals to produce flammable hydrogen gas. Avoid excessive heat. See Section 10 for incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA Exposure Guidelines:

Component	Limits
Phosphoric Acid	1 mg/m3 TWA
Sulfuric Acid	1 mg/m3 TWA

ACGIH Exposure Guidelines:

Component	Limits
Phosphoric Acid	3 mg/m3 STEL; 1 mg/m3 TWA
Sulfuric Acid	0.2 mg/m3 TWA (thoracic fraction)

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 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: Acid-proof. Gauntlet-type. 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. Acid gas cartridge. NIOSH-Approved Supplied Air Respirator (SAR). 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. Full-rubber acid 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.
Color: Clear. Light yellow / brown.
Odor: No odor.
Odor Threshold: N.D.
pH: 1.00 (as is)
Freezing Point (deg. F): N.D.
Melting Point (deg. F): N.D.
Initial Boiling Point or Boiling Range: N.D.
Flash Point: > 201 °F
Flash Point Method: Estimated.
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: 1.3150 @ 25 C
Solubility in Water: Soluble
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 produce 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 heat, sparks or open flames. Generation of gas during decomposition can cause pressure in closed systems. Avoid freezing.

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.

Hazardous Decomposition Products: Phosphorous oxides. Phosphine. Carbon dioxide. Carbon monoxide. Aldehydes. Ketones. Toxic vapors. Alcohols. Ethers. Organic acids. Sulfur dioxide. Sulfur oxides. Sulfuric acid.

11. TOXICOLOGICAL INFORMATION

Component	Oral LD50	Dermal LD50	Inhalation LC50
Phosphoric Acid	Rat: 1530 mg/kg	Rabbit: 2730 mg/kg	1H Rat: > 850.0 mg/m3
C(10-16)-Alkylbenzenesulfonic Acid	Rat: 530 mg/kg	Rat: 530 mg/kg	No Data
Sulfuric Acid	Rat: 2140 mg/kg	No Data	2H Rat: 510.0 mg/m3

Acute Toxicity Estimate (ATE):

Oral:	2,080 mg/kg
Dermal:	5,360 mg/kg
Inhalation Vapor:	14.2994 mg/L
Inhalation Dust/Mist:	14.2994 mg/L

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

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

Skin Contact: CORROSIVE-Causes severe irritation and burns. Contact may cause: permanent skin damage. Contact may not produce an immediate burning sensation, delaying awareness that contact has occurred. May cause: sensitization. severe tissue damage.

Skin Absorption: No data available.

Inhalation: CORROSIVE-Causes severe irritation and burns. Vapors or mists may irritate: respiratory tract. Serious cases of inhalation may cause: respiratory problems and late pulmonary edema. Inhalation of high concentrations may cause: drowsiness. headache. nausea.

Ingestion: CORROSIVE-Causes severe irritation and burns. May irritate or burn: mouth. throat. stomach. May cause: nausea. vomiting. abdominal discomfort. abdominal pain. burning sensation. Severe exposures may cause: shock. circulatory collapse. death. Excessive exposure may cause: central nervous system effects. Aspiration of liquid may cause lung damage.

Medical Conditions Aggravated by Exposure to Product: Eye disorders. Skin disorders. Impaired respiratory function. Kidney disorders. Respiratory system disorders.

Other: In animals, effects have been reported on the following organs: lungs.

Cancer Information:
This product contains 0.1% or more of the following chemicals listed by NTP, IARC or OSHA as known or possible carcinogens:
Sulfuric acid mist

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. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

14. TRANSPORT INFORMATION

DOT (Department of Transportation):

Identification Number:	UN1760
Proper Shipping Name:	Corrosive Liquid, N.O.S. (Contains Dodecylbenzenesulfonic Acid, Phosphoric Acid)
Hazard Class:	8
Packing Group:	III
Label Required:	CORROSIVE
Reportable Quantity (RQ):	5000# (Phosphoric 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:

Immediate (Acute)	Delayed (Chronic)	Fire Hazard	Pressure Release	Reactive
Yes	Yes	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
Sulfuric Acid	7664-93-9	Yes	Yes	Yes	No	Yes	Yes

***Prop 65 - May Contain the Following Trace Components:**
This product may contain trace amounts of (a) chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm.

Note: * Sulfuric acid appears on the Section 313 List. However, the listing only applies to the aerosol forms of sulfuric acid. * This component contains approximately 31% Dodecylbenzenesulfonic acid which has a CERCLA reportable quantity of 1000#.

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
Corrosive. Causes irreversible eye damage or skin burns. Harmful if swallowed or absorbed through skin or inhaled. Do not get in eyes, on skin or on clothing. Avoid breathing spray mist. Wear goggles or face shield. Wear protective clothing and rubber gloves. Wash thoroughly with soap and water after handling. Removed contaminated clothing and wash clothing before reuse.

Environmental Hazards
Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or public waters unless this product is specifically identified and addressed in a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to the discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant

authority. For guidance, contact your State Water Board or Regional Office of the EPA.

Physical and Chemical Hazards
Mix only with water. Do not mix with products or solutions containing chlorine, lye, washing powder, or household chemicals. Not for use on galvanized surfaces or sinks, or concrete or terrazzo floors.

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.

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