



PS-105

Safety Data Sheet

Revision date: July 28, 2016

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name : PS-105
Product form : Mixture
Product code : 10-10023

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Acidic Presoak

1.3. Details of the supplier of the safety data sheet

ChemQuest Inc.
21365 Hamburg Ave.
Lakeville, MN 55044
Phone: (877) 437-3478
Email: infocq@chemquestinc.com

1.4. Emergency telephone number

Emergency number : CHEMTREC: 1-800-424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

<u>Hazard Code</u>	<u>Hazard Class</u>	<u>Hazard Category</u>
H314	Skin corrosion/irritation	1B
H350	Carcinogenicity	1A
H370	Specific target organ toxicity, single exposure (Skin, eyes, mucous membranes, respiratory tract, teeth)	1
H372	Specific target organ toxicity, repeated exposure (Skin, eyes, mucous membranes, respiratory tract, teeth, laryngeal cancer)	1

HANDLE IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE AND SAFETY PRACTICES

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



Signal Word (GHS-US): **Danger**

Hazard Statements (GHS-US):

H314: Causes severe skin burns and eye damage
H350: May cause cancer
H370: Causes damage to organs
H372: Causes damage to organs through prolonged or repeated exposure

Precautionary statements (GHS-US):

P201: Obtain special instructions before use
P202: Do not handle until all safety precautions have been read and understood
P260: Do not breathe dust/fumes/gas/mist/vapors/spray
P264: Wash thoroughly after handling
P270: Do not eat, drink or smoke when using this product
P280: Wear protective gloves/protective clothing/eye protection/face protection
P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303+361+353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P363: Wash contaminated clothing before reuse
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P310: Immediately call a POISON CENTER or doctor/physician

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P321: Specific treatment (see Section 4)

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing

P308+313: IF exposed or concerned: Get medical advice/attention

P307+311: IF exposed: Call a POISON CENTER or doctor/physician

P314: Get Medical advice/attention if you feel unwell

P405: Store locked up

P501: Dispose of contents/container in accordance with local, state and federal authorities.

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	CAS #	%
Sulfuric Acid	7664-93-9	40 - 50
Phosphoric Acid	7664-38-2	5 - 10
Nonylphenol Ethoxylate	9016-45-9	1 - 5

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing Use artificial respiration and oxygen if needed. If irritation persists, seek medical attention.
First-aid measures after skin contact	: IF ON SKIN: Immediately rinse with plenty of water (for at least 15 minutes). . If irritation persists, seek medical attention.
First-aid measures after eye contact	: IF IN EYES: Rinse immediately and thoroughly, pulling the eyelids well away from the eye (15 minutes minimum). . If irritation persists, seek medical attention.
First-aid measures after ingestion	: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Dilute stomach contents by drinking water. If vomiting occurs spontaneously, keep head below hips to prevent breathing vomit into lungs. Call physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries	: Causes severe skin burns and eye damage. Causes damage to organs through acute and repeat exposure. May cause cancer.
Symptoms/injuries after inhalation	: Causes headache, nausea and irritation or possible server burns of respiratory tract. Strong inorganic acid mists containing sulfuric acid are known to cause cancer.
Symptoms/injuries after skin contact	: Highly corrosive to skin.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: Severe irriation or burns to mouth, throat, esophagus and stomach. Etching of teeth.
Chronic symptoms	: Burns, Cancer. See Section 11.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians: For inhalation, consider oxygen. Avoid gastric or emesis. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

suitable extinguishing media : Alcohol-resistant foam. Carbon dioxide. Dry powder. Water spray.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: The product is not flammable.
Explosion hazard	: May ignite or explode in contact with combustible materials.
Reactivity	: Contact with metals produces hydrogen gas which may form explosive mixtures with air.

5.3. Advice for firefighters

Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Do not dispose of fire-fighting water in the environment.

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Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection. Wear self-contained breathing apparatus and protective suit (see item 8).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Evacuate area. Keep upwind. Ventilate area. Spill should be handled by trained clean-up crews properly equipped with respiratory equipment and full chemical protective gear (see Section 8).

6.1.1. For non-emergency personnel

Protective equipment : Wear Protective equipment as described in Section 8.

Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Wear suitable protective clothing, gloves and eye or face protection. Approved supplied-air respirator, in case of emergency.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Prevent entry to sewers and public waters. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for cleaning up : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13).

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Wear proper safety equipment including chemically resistant gloves and safety glasses or goggles. Use with adequate ventilation. Wash thoroughly after handling. Do not get in eyes or on skin. Do not breathe mist or vapor. Do not swallow.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : heat sources. Keep container tightly closed. Store between 50 F & 100 F.

7.3. Specific end use(s)

No additional information available

SECTION 8 : Exposure controls/personal protection

8.1. Control parameters

Sulfuric Acid, CAS# 7664-93-9			
OSHA PEL (TWA) ppm – if units not stated	OSHA PEL (STEL) ppm – if units not stated	OSHA PEL (Ceiling) ppm – if units not stated	ACGIH-TLV
1 mg/m3	3 mg/m3	Not Established	0.2 mg/m3

Phosphoric Acid, CAS# 7664-38-2			
OSHA PEL (TWA) ppm – if units not stated	OSHA PEL (STEL) ppm – if units not stated	OSHA PEL (Ceiling) ppm – if units not stated	ACGIH-TLV
1 mg/m3	3 mg/m3	Not Established	1 mg/m3

Nonylphenol Ethoxylate, CAS# 9016-45-9			
OSHA PEL (TWA) ppm – if units not stated	OSHA PEL (STEL) ppm – if units not stated	OSHA PEL (Ceiling) ppm – if units not stated	ACGIH-TLV
Not Established	Not Established	Not Established	Not Established

8.2. Exposure controls

Personal protective equipment : Protective safety glasses or goggles. Chemically resistant gloves. Protective clothing. Face shield. Respiratory protection of the dependent type.

Hand protection : Chemical resistant gloves.

Eye protection : Use chemically resistant safety glasses or goggles. A face shield when possibility exists for eye or face contact due to spraying liquid or airborne particles.

Skin and body protection : Wear long sleeves. Wear suitable protective clothing. Face shield when possibility exists contact due to spraying liquid or airborne particles.

Respiratory protection : Where excessive vapor, mist, or dust may result, use approved respiratory protection equipment.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Dyed.
Color	: No data available
Odor	: No data available
Odor Threshold	: No data available
pH	: 0.2
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: > 100 °C
Flash point	: No data available
Self ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: 1.168
Solubility	: Complete solubility in water.
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosive limits	: No data available

9.2. Other information

Phosphorus content is approximately 2.784% by weight

SECTION 10: Stability and reactivity

10.1. Reactivity

Contact with reactive metals (e.g. aluminum) may result in the generation of hydrogen gas.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

Corrosive in contact with metals. Contact with metallic substances may release flammable hydrogen gas. Contact with strong Bases will cause excessive heat and splattering.

10.4. Conditions to avoid

None known

10.5. Incompatible materials

Metals. Strong bases. Avoid strong oxidizing agents.

10.6. Hazardous decomposition products

Thermal decomposition may generate : Oxides of carbon, phosphorus, chloride and of sulfur.

Other decomposition products : No data available.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Oral LD50: > 2000 mg/kg (rat) Calculated

Dermal LD50: > 2000 mg/kg (rat) Calculated

Inhalation LC50: Per ECHA, ANNEX VI - Sulfuric Acid is not classified as toxic by inhalation

Skin corrosion/irritation : Causes severe skin burns and eye damage

Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitization : Causes headache, nausea and irritation or burns of respiratory tract.

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Germ cell mutagenicity	: Not classified
Carcinogenicity	: Strong inorganic acid mists containing sulfuric acid, CAS#7664-93-9: IRAC Group 1, known human carcinogens, < 45% by wt.
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Skin, eyes, mucous membranes, respiratory tract, teeth. Sulfuric Acid: Vapors may cause nasal secretions, sneezing, a burning or tickling sensation in the nose and throat and retrosternal region followed by cough, respiratory distress, tracheobronchitis, chemical pneumonitis and possible spasm of the vocal cords. A single over exposure may lead to laryngeal, tracheobronchial and pulmonary edema.
Specific target organ toxicity (repeated exposure)	: Skin, eyes, mucous membranes, respiratory tract, teeth, laryngeal cancer. Sulfuric Acid: Inflammation of the upper respiratory tract, chronic bronchitis and etching of the dental enamel. Excessive exposure over long periods have resulted in bronchitic symptoms, rhinorrhea, respiratory infections, emphysema, stomatitis and digestive disturbances. Chronic inhalation may cause alkaline depletion of the body producing an acidosis which affects the nervous system. Risk of laryngeal cancer.
Aspiration hazard	: Not classified
Symptoms/injuries after inhalation	: See Section 4.
Symptoms/injuries after skin contact	: See Section 4.
Symptoms/injuries after eye contact	: See Section 4.
Symptoms/injuries after ingestion	: See Section 4
Chronic symptoms	: Burns, Cancer. (See Specific target organ toxicity repeat exposure)

SECTION 12: Ecological information

- 12.1. **Toxicity**
No Data
- 12.2. **Persistence and degradability**
No Data
- 12.3. **Bioaccumulative potential**
No Data
- 12.4. **Mobility in soil**
No Data
- 12.5. **Other adverse effects**
No Data

SECTION 13: Disposal considerations

- 13.1. **Waste treatment methods**
Waste treatment methods : Do not discharge to public wastewater systems without permit of pollution control authorities. No discharge to surface waters is allowed without an NPDES permit.
- Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations. Do not allow the product to be released into the environment.

SECTION 14: Transport information

- 14.1. **UN number, proper shipping name, class and packaging group.:**
Domestic Ground shipments
UN1760, CORROSIVE LIQUIDS, N.O.S. (SULFURIC ACID / PHOSPHORIC ACID) 8, II

- 14.2. **Additional information**

SECTION 15: Regulatory information

- 15.1. **US Federal regulations**
TSCA Inventory: The components of this product are listed.
SARA Section 311/312, Hazard Category (40CFR 370.2): Acute and Chronic health hazard.
SARA Section 313, Toxic Release Reporting (40CFR Part372): Sulfuric Acid (aerosol forms only), CAS# 7664-93-9, < 45%
SARA Section 302, EHS Emergency Planning (40CFR Part 355): Sulfuric Acid, CAS# 7664-93-9, RQ 1000 lbs.
SARA Section 304, EHS Release Reporting (40CFR Part 355): Sulfuric Acid, CAS# 7664-93-9, RQ 1000 lbs.
CERCLA Section 102-103 HS Release Reporting (40 CFR par302-102a): .

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Sulfuric Acid, CAS# 7664-93-9, RQ 1000 lbs.

Phosphoric Acid, CAS# 7664-38-2, RQ 5000 lbs.

15.2. International regulations

No Data

15.2.2. National regulations

No Data

15.3. US State regulations

California Prop. 65:

Approximate quantities by weight

Strong inorganic acid mists containing sulfuric acid CAS#7664-93-9, Cancer < 45%

Ethylene oxide CAS# 75-21-8 /Cancer and Reproductive Harm < 0.00004%

SECTION 16: Other information

Other information :
:

NFPA health hazard : 3

NFPA fire hazard : 0

NFPA reactivity : 2

HMIS III Rating

Health : 3

Flammability : 0

Physical : 2

Personal Protection :

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