



SILVER FERN CHEMICAL, INC.

Safety Data Sheet

Polyphosphoric Acid

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Polyphosphoric Acid

MANUFACTURER/DISTRIBUTOR

Silver Fern Chemical, Inc
121 W. De La Guerra Street, Suite B
Santa Barbara, CA 93101 USA
1-866-282-3384

Emergency telephone number: INFO-TRAC +1-800-535-5053; Outside USA & Canada +1-352-323-3500

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Skin Corrosion, Category 1A

GHS LABEL

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)



Corrosion

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H314: Causes severe skin burns and eye damage.

PRECAUTIONARY STATEMENTS

Prevention:

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P264: Wash skin thoroughly after handling.

Response:

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P363: Wash contaminated clothing before reuse.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310: Immediately call a POISON CENTER/doctor.

P321: Specific treatment (see first aid measures on this label).

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage:

P405: Store locked up.

Disposal:

P501: Dispose of contents/container to a licensed contractor in accordance with local, state and federal regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Polyphosphoric Acids	95 - 118	8017-16-1

4. FIRST AID MEASURES

EYES: Rinse immediately with plenty of water for 15 minutes. Do not apply neutralizing agents. Take victim to an ophthalmologist. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

SKIN: Wash immediately with lots of water (15 minutes)/shower. Do not apply (chemical) neutralizing agents. Remove clothing while washing. Do not remove clothing if it sticks to the skin. Cover wounds with sterile bandage. Consult a doctor/medical service. If burned surface > 10%: take victim to hospital. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

INGESTION: Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Do not give activated charcoal. Immediately consult a doctor/medical service. Take the container/vomit to the doctor/hospital. Do not give chemical antidote. Ingestion of large quantities: immediately to hospital. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

INHALATION: Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service. Allow victim to breathe fresh air. Allow the victim to rest.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Corrosion of the eye tissue.

SKIN: Caustic burns/corrosion of the skin.

INGESTION: Burns to the gastric/intestinal mucosa.

INHALATION: EXPOSURE TO HIGH CONCENTRATIONS: Irritation of the respiratory tract. Irritation of the nasal mucous membranes. Respiratory difficulties.

5. FIRE FIGHTING MEASURES

GENERAL HAZARD: Do not use a direct stream of water.

EXTINGUISHING MEDIA: Dry Chemical, CO₂, Foam. Water Spray.

HAZARDOUS COMBUSTION PRODUCTS: Decomposes exothermically on exposure to water (moisture). On burning: release of toxic and corrosive gases/vapours (phosphorus oxides). Reacts violently with many compounds e.g.: with (some) bases, with (strong) oxidizers and with (strong) reducers. Reacts with (some) metals: release of highly flammable gases/vapours (hydrogen).

FIRE FIGHTING PROCEDURES: Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

FIRE FIGHTING EQUIPMENT: In case of fire, wear a full-face positive pressure self contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb or contain liquid with sand, earth, or spill control. Shovel up and place in a labeled sealable container for subsequent safe disposal.

LARGE SPILL: Shut off leak if safe to do so. Evacuate area of all nonessential personell. Dike area and contain spill with inert, non-combustible absorbent material. Reclam into recovery or salvage drums or vacuum truck for proper disposal.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Prevent contamination of water.

LAND SPILL: Prevent contamination of the soil.

GENERAL PROCEDURES: Avoid contact with skin and eyes. Do not breathe vapors. Evacuate area of all non-essential personnel.

SPECIAL PROTECTIVE EQUIPMENT: Use protective equipment recommended in Section 8.

7. HANDLING AND STORAGE

HANDLING: Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Use corrosionproof equipment. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Keep away from naked flames/heat. Observe strict hygiene. Keep container tightly closed. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

STORAGE: Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)				
EXPOSURE LIMITS				
Chemical Name	Type		ppm	mg/m ³
Polyphosphoric Acids	Supplier OEL	TWA	NL	NL
		STEL	NL	NL

ENGINEERING CONTROLS: Provide adequate ventilation. Eye washes and showers for emergency use.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear chemical splash goggles and a face shield.

SKIN: Wear chemically resistant gloves.

RESPIRATORY: High gas/vapour concentration: gas mask with filter type B. Wear appropriate mask.

PROTECTIVE CLOTHING: Use protective clothing, which is chemical resistant to this material.

WORK HYGIENIC PRACTICES: Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink, or smoke. Wash hands after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid

ODOR: Odorless

COLOR: Colorless

pH: 1 (1% aqueous solution)

FLASH POINT AND METHOD: NA = Not Applicable

FLAMMABLE LIMITS: NA = Not Applicable

AUTOIGNITION TEMPERATURE: NA = Not Applicable

VAPOR PRESSURE: Not Available

VAPOR DENSITY: > 2

BOILING POINT: Not Available

FREEZING POINT: Not Available

MELTING POINT: Not Available

POUR POINT: Not Available

SOLUBILITY IN WATER: Exothermically soluble in water. Decomposes on exposure to water. Soluble in ethanol.

SPECIFIC GRAVITY: 2.1

VISCOSITY: Not Available

10. STABILITY AND REACTIVITY

REACTIVITY: Decomposes exothermically on exposure to water (moisture). On burning: release of toxic and corrosive gases/vapours (phosphorus oxides). Reacts violently with many compounds e.g.: with (some) bases, with (strong) oxidizers and with (strong) reducers. Reacts with (some) metals: release of highly flammable gases/vapours (hydrogen).

STABILITY: Unstable on exposure to moisture.

CONDITIONS TO AVOID: Direct sunlight. Extremely high or low temperatures.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon. Phosphorus oxides.

INCOMPATIBLE MATERIALS: Strong acids. Strong bases. Strong oxidizers, alcohols, ketones, amines and combustible material.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

DERMAL LD₅₀: Not Available

ORAL LD₅₀: 1530 mg/kg - rat

INHALATION LC₅₀: > 0.85 mg/m³; rat (1 h)

SKIN CORROSION/IRRITATION: Causes severe skin burns.

SERIOUS EYE DAMAGE/IRRITATION: Causes serious eye damage.

RESPIRATORY OR SKIN SENSITISATION: Not expected to be a sensitizer.

GERM CELL MUTAGENICITY: None known.

CARCINOGENICITY

NOTES: Not classified as a human carcinogen.

REPRODUCTIVE TOXICITY: None known.

STOT-SINGLE EXPOSURE: None Expected.

STOT-REPEATED EXPOSURE: None Expected.

ASPIRATION HAZARD: Not classified as an aspiration hazard.

12. ECOLOGICAL INFORMATION

BIOACCUMULATION/ACCUMULATION: Does not bioaccumulate.

DISTRIBUTION: Soluble in water.

AQUATIC TOXICITY (ACUTE): Slightly harmful to fishes (LC50 100-1000 mg/l). May cause eutrophication. Harmful to aquatic organisms. pH shift.

Notes: Avoid release to the environment.

CHEMICAL FATE INFORMATION: Not Established

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of contents/container to a licensed contractor or facility in accordance with local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Corrosive liquid, acidic, inorganic, n.o.s. (polyphosphoric acid)

PRIMARY HAZARD CLASS/DIVISION: 8

UN/NA NUMBER: UN3264

PACKING GROUP: III

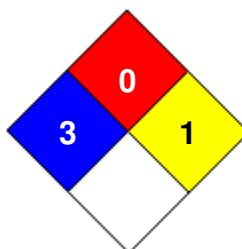
PLACARDS: Corrosive

ROAD AND RAIL (ADR/RID)**PROPER SHIPPING NAME:** Corrosive Liquid, Acidic, Inorganic, N.O.S.**UN NUMBER:** UN3264**KEMLER NUMBER:** 80**HAZARD CLASS:** 8**CLASSIFICATION CODE:** C1**PACKING GROUP:** III**15. REGULATORY INFORMATION****UNITED STATES****SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)****311/312 HAZARD CATEGORIES:** Acute Health**FIRE:** No **PRESSURE GENERATING:** No **REACTIVITY:** No **ACUTE:** Yes **CHRONIC:** No**302/304 EMERGENCY PLANNING****EMERGENCY PLAN:** NA = Not Applicable**CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT)****CERCLA REGULATORY:** All components listed or exempt.**TSCA (TOXIC SUBSTANCE CONTROL ACT)**

Chemical Name	CAS
Polyphosphoric Acids	8017-16-1

TSCA STATUS: All components listed or exempt.**CLEAN AIR ACT****40 CFR PART 68---RISK MANAGEMENT FOR CHEMICAL ACCIDENT RELEASE PREVENTION:** NA = Not Applicable**CLEAN AIR ACT (HAZARDOUS AIR POLLUTANTS):** NA = Not Applicable**16. OTHER INFORMATION****HMIS RATING**

HEALTH		3
FLAMMABILITY		0
PHYSICAL HAZARD		1
PERSONAL PROTECTION		

NFPA CODES**DISCLAIMER OF RESPONSIBILITY**

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