



Safety Data Sheet

Polyphosphoric Acid

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

1.1 Product Identifier

Trade Name Polyphosphoric Acid
CAS Number 8017-16-1

Revision Date 03/24/2021

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

No information available.

1.3 Details of the supplier of the safety data sheet

Shrieve Chemical Company
1442 Lake Front Circle
Suite 500
The Woodlands, TX 77380 US
phone: (800) 367-4226 Audris King

1.4 Emergency telephone number

CHEMTREC 800-424-9300 (US)
+1-703-741-5970 (International)

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Skin Corrosion, Category 1A

2.2 Label elements



Signal Word Danger

Hazard Statements

H314-Causes severe skin burns and eye damage.

Precautionary Statements

Prevention

P260-Do not breathe dust/fume/gas/mist/vapors/spray.
P264-Wash skin thoroughly after handling.
P280-Wear protective gloves/protective clothing/eye protection/face protection.

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 shower.
P304+P340-IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310-Immediately call a POISON CENTER or doctor.
P363-Wash contaminated clothing before reuse.

Storage

P405-Store locked up.



Safety Data Sheet

Polyphosphoric Acid

Disposal

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

2.3 Other hazards

No information available.

2.4 Unknown Acute Toxicity (US)

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

No information available.

3.2 Mixtures

Chemical Name	CAS Number	EC No.	Concentration %	Classification
Polyphosphoric Acid	8017-16-1		95-118	Skin Corrosion, Category 1A

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

No information available.

After 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.

After skin contact

Wash immediately with minute 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. 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.

After eye contact

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.

After 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. 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.

Self-protection of the first aider

No information available.

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Dry chemical, CO₂, foam, water spray.

Unsuitable extinguishing media

Do not use a direct stream of water.

5.2 Special hazards arising from the substance or mixture

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



Safety Data Sheet

Polyphosphoric Acid

(some) metals: release of highly flammable gases/vapors (hydrogen).

5.3 Advice for firefighters

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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

6.2 Environmental precautions

Prevent contamination of water or soil.

6.3 Methods and material for containment and cleaning up

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

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

6.4 Reference to other sections

No information available.

SECTION 7: Handling and storage

7.1 Precautions for safe 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.

7.2 Conditions for safe storage, including any incompatibilities

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

7.3 Incompatibilities/Specific end uses(s)

Incompatibilities No information available.

Specific end use(s) No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Polyphosphoric Acid(8017-16-1)

No information available.

8.2 Engineering Controls/Exposure Controls

Engineering controls

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Environmental exposure controls

No information available.

8.3 Protective Measures

Eye/face protection

Wear chemical splash goggles and a face shield.

Hand protection

Wear chemically resistant gloves.

Other Skin protection

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

Other protection

No information available.

Respiratory protection

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



Safety Data Sheet

Polyphosphoric Acid

General hygiene consideration

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

Thermal hazards

No information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Property	Value	Property	Value
Appearances	Colorless.	Autoignition Temp	No information available.
Boiling Points	No information available.	Flash Points	No information available.
Melting Points	No information available.	Odors	Odorless.
Pour Point	No information available.	Specific Gravity	2.1.
State of Matter	No information available.	Vapor Densities	>2.
Vapor Pressures	No information available.	pH Value	1 (1% aqueous solution).

Property

Value

9.2 Other information

Additional Information

Solubility: Exothermically soluble in water. Decomposes on exposure to water. Soluble in ethanol.

SECTION 10: Stability and Reactivity

10.1 Reactivity

Decomposes exothermically on exposure to water (moisture). On burning: release of toxic and corrosive gases/vapors (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/vapors (hydrogen).

10.2 Chemical stability

Unstable on exposure to moisture.

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5 Incompatible materials

Strong acids, strong bases, strong oxidizers, alcohols, ketones, amines and combustible material.

10.6 Hazardous decomposition products

Oxides of carbon. and phosphorus oxides.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Source

Skin contact

No information available.

Eye contact

No information available.

Inhalation

No information available.

Ingestion

No information available.

Symptoms related to characteristics

No information available.

Acute effects

No information available.

Chronic effects

No information available.

Numerical measures of Toxicity



Safety Data Sheet

Polyphosphoric Acid

Polyphosphoric Acid (8017-16-1)

LC50 INHALATION RAT	> 0.85 mg/m3; 1h.
LD50 ORAL RAT	1,530 mg/kg.

Skin corrosion/irritation	Causes severe skin burns.
Serious eye damage/eye irritation	Causes serious eye damage.
Respiratory sensitization	Not expected to be a sensitizer.
Skin sensitization	Not expected to be a sensitizer.
Carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC, NTP, or OSHA.
Germ cell mutagenicity	No information available.
Reproductive toxicity	No information available.
Specific target organ toxicity - single exposure	No information available.
Specific target organ toxicity - repeated exposure	No information available.
Aspiration hazard	Not classified as an aspiration hazard.

SECTION 12: Ecological information

12.1 Toxicity

Avoid release to the environment. Slightly harmful to fishes (LC50 100-1000 mg/l). May cause eutrophication. Harmful to aquatic organisms. pH shift.

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

Does not bioaccumulate.

12.4 Mobility in soil

Soluble in water.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Other adverse effects

No information available.

12.7 Additional Information

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Handling for disposal

No information available.

Methods of disposal

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

Contaminated packaging

Dispose of as unused product.



Safety Data Sheet

Polyphosphoric Acid

SECTION 14: Transport Information

D.O.T. Ground/Rail

14.1 UN number	UN3264
14.2 UN proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s. (Polyphosphoric Acid)
14.3 Transport hazard class(es)	8
14.4 Packing group	II

D.O.T./ADR/RID - Ground transportation

Sea transport (IMDG)

Air transport (ICAO/IATA)

14.5 Environmental hazards

No information available.

14.6. Special precautions for user

No information available.

14.7. Transport in bulk according to Annex II of Marpol112 and the IBC Code

No information available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Country or region	Inventory List	On Inventory (yes/no)
Australia	Australian Inventory of Industrial Chemicals (AIIC)	Yes
Canada	Canadian Domestic Substance List	Yes
China	Inventory - China - Inventory of Existing Chemical Substances (IECSC)	Yes
European Union	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Japan	Inventory - Japan - Existing and New Chemical Substances (ENCS) and Industrial Safety and Health Law Substances (ISHL)	Yes
South Korea	Inventory - Korea - Existing Chemicals Inventory (KECI/KECL)	Yes
Mexico	Mexico - National Inventory of Chemical Substances of Mexico (INSQ)	Yes
New Zealand	Inventory - New Zealand - Inventory of Chemicals (NZIoC)	Yes
Philippines	Inventory - Philippines - Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States of America	TSCA (Toxic Substances Control Act) Inventory List	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
Thailand	Thailand Existing Chemicals Inventory (TECI)	Yes
Vietnam	National Chemicals Inventory (NCI)	Yes



Safety Data Sheet

Polyphosphoric Acid

15.2 Chemical Safety Assessment

No information available.

Additional Information

California Prop. 65 Statement: This product does not require a warning under California Prop. 65.

SECTION 16: Other information

Specific Hazard: N/A

HMIS Ratings :

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	1
PERSONAL PROTECTION	

3 - Extreme Danger

0 - Will not Burn

1 - Normally stable, but can become unstable at high temperatures and pressures.

NFPA :



The information is based on the data of which we are aware and is believed to be correct as of the data hereof. Since the information contained herein may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modification of the information, we do not assume any responsibility for the result of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.

Preparation/Revision Date: 03/24/2021