

Safety Data Sheet

Neutralizer

P264	Wash hands 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+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/shower.
P304+P340	IF INHALED: Remove person to fresh air and keep 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.
P405	Store locked up.
P501	Dispose of contents/container in accordance with applicable regional, national and local laws and regulations.

SECTION 3: Composition/information on ingredients

Mixtures

Components

1. Phosphoric acid

Concentration 10 - 30 %*
CAS no. 7664-38-2

2. Ammonium bifluoride

Concentration 3 - 7 %*
CAS no. 1341-49-7

3. Glycolic acid

Concentration 1 - 5 %*
CAS no. 79-14-1

Trade secret statement (OSHA 1910.1200(i))

*The specific chemical identities and/or actual concentrations or actual concentration ranges for one or more listed components are being withheld as trade secrets under the US regulation 29 CFR 1910.1200(i).

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).
If inhaled	Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell.
	Acute and delayed symptoms and effects: May cause respiratory irritation. Signs/symptoms may include burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema.
In case of skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower for at least 15 minutes. Immediately call a poison center or doctor. Wash contaminated clothing before reuse.

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In case of eye contact

Acute and delayed symptoms and effects: Causes severe skin burns. Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

If swallowed

Rinse cautiously with water for at least 30 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor.

Acute and delayed symptoms and effects: Causes serious eye damage. Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration. Never give anything by mouth to an unconscious person.

Acute and delayed symptoms and effects: Harmful if swallowed. Causes burns to nose, mouth, throat, and digestive tract. Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea, blood in the feces and/or vomitus may also be seen.

Most important symptoms/effects, acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of immediate medical attention and special treatment needed, if necessary

Symptoms may not appear immediately. For large exposures to Ammonia fluoride, hypocalcemia and hypomagnesia may occur.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Small Fire: Dry chemical, CO2 or water spray.

Large Fire: Dry chemical, CO2, alcohol-resistant foam or water spray. Move containers from fire area if you can do it without risk. Dike fire-control water for later disposal; do not scatter the material.

Specific hazards arising from the chemical

Oxides of carbon. Oxides of nitrogen. Oxides of phosphorus. Ammonia.

Special protective actions for fire-fighters

Fire may produce irritating, corrosive and/or toxic gases. Runoff from fire control or dilution water may cause pollution. Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear respiratory protection if necessary. Do not breathe dust/fume/gas/mist/vapors/spray. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section 8.

Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas.

Methods and materials for containment and cleaning up

Stop leak if you can do it without risk. Sweep up and shovel into suitable containers for disposal.

Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage**Precautions for safe handling**

Do not swallow. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. See Section 8 for information on Personal Protective Equipment.

Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Store away from incompatible materials. See Section 10 for information on Incompatible Materials. Keep out of reach of children.

Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection**Control parameters****CAS: 1341-49-7 (EC: 215-676-4)**

Ammonium bifluoride

ACGIH: 2.5 mg/m³ TLV® inhalation; OSHA: 2.5 mg/m³ TWA inhalation

CAS: 7664-38-2

Phosphoric acid

ACGIH (USA): 1 mg/m³, (ST) 3 mg/m³ TLV® inhalation; Cal/OSHA: 1 mg/m³, (ST) 3 mg/m³ PEL inhalation; NIOSH: 1 mg/m³, (ST) 3 mg/m³ REL inhalation; OSHA: 1 mg/m³ PEL inhalation

Appropriate engineering controls

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, gas, etc.) below recommended exposure limits.

Individual protection measures, such as personal protective equipment (PPE)**Eye/face protection**

Tightly fitting safety goggles. Use equipment for eye protection that meets the standards referenced by OSHA regulations in 29 CFR 1910.133 for Personal Protective Equipment. Ensure that eyewash stations and/or safety showers are close to the workstation location if working with concentrated product.

Skin protection

Wear protective gloves (rubber, chemical resistant). Consult manufacturer specifications for further information.

Body protection

Wear protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

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Respiratory protection

If engineering controls and ventilation are not sufficient to control exposure to below the allowable limits then an appropriate NIOSH/MSHA approved air-purifying respirator with particulate filter, or self-contained breathing apparatus must be used. Supplied air breathing apparatus must be used when oxygen concentrations are low or if airborne concentrations exceed the limits of the air-purifying respirators.

Thermal hazards

No data available.

Environmental exposure controls

Prevent entry into waterways, sewers, basements or confined areas.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical State	Liquid
Color	Clear
Odor	Acrid to mild.
Melting point/freezing point	No data available.
Boiling point or initial boiling point and boiling range	No data available.
Flammability	No data available.
Lower and upper explosion limit/flammability limit	No data available.
Flash point	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
pH	No data available.
Kinematic viscosity	No data available.
Solubility	Soluble in water.
Partition coefficient n-octanol/water (log value)	No data available.
Vapor pressure	No data available.
Density and/or relative density	1.128 (Water = 1).
Relative vapor density	No data available.
Particle characteristics	No data available.

SECTION 10: Stability and reactivity

Reactivity

Stable under recommended storage conditions.

Chemical stability

Stable under normal storage conditions.

Possibility of hazardous reactions

Phosphoric acid attacks many metals forming hydrogen gas.

Conditions to avoid

Contact with incompatible materials. Sources of ignition. Exposure to heat.

Incompatible materials

Acids. Bases. Oxidizers. Metals. Halogenated organic solvents. Alcohols. Acetaldehyde.

Hazardous decomposition products

Hydrogen gas.

SECTION 11: Toxicological information**Information on toxicological effects****Acute toxicity**

Likely Routes of Exposure: Eye contact. Skin contact. Inhalation. Ingestion.

Product:

ATE (oral) of mixture: 1429 mg/kg

ATE (dermal): could not calculate

ATE (inhalation, gaseous): could not calculate

Component Toxicity:

Glycolic Acid

LD50 Oral - Rat - 2,040 mg/kg

LC50 Inhalation - Rat - 3.6 mg/l - 4 h

Phosphoric acid

LD50 Oral - Rat - 1530 mg/kg

LD50 Skin - Rat - 2740 mg/kg

LC50 Inhalation - Rat - > 850 mg/m³ - 1 h

Symptoms (including delayed and immediate effects):**Inhalation**

May cause respiratory irritation. Signs/symptoms may include burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema.

Ingestion

Harmful if swallowed. Causes burns to nose, mouth, throat, and digestive tract. Signs/symptoms may include severe mouth, throat and abdominal pain, nausea, vomiting, and diarrhea, blood in the feces and/or vomitus may also be seen.

Skin corrosion/irritation

Causes severe skin burns. Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

Serious eye damage/irritation

Causes serious eye damage. Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Respiratory or skin sensitization

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

IARC: Group 3: Not classifiable as to its carcinogenicity to humans (Ammonium bifluoride)

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available.

STOT-single exposure

May cause respiratory irritation.

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

SECTION 12: Ecological information**Toxicity**

No data available on product

Components:

Glycolic Acid

LC50 - Danio rerio (zebra fish) - 5,000 mg/l - 96 h

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

No data available.

SECTION 13: Disposal considerations**Disposal of the product**

Disposal should be in accordance with applicable Federal, State and local laws and regulations. Local regulations may be more stringent than State or Federal requirements.

Disposal of contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information**DOT (US)**

UN Number: UN3264

Class: 8

Packing Group: II

Proper Shipping Name: Corrosive liquid, acidic, inorganic, n.o.s. (Phosphoric acid, Ammonium bifluoride)

SECTION 15: Regulatory information**Safety, health and environmental regulations specific for the product in question****SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

Massachusetts Right To Know Components

Chemical name: Phosphoric acid

CAS number: 7664-38-2

Chemical name: Ammonium bifluoride

CAS number: 1341-49-7

Pennsylvania Right To Know Components

Glycolic acid

CAS-No. 79-14-1

Chemical name: Ammonium biflouride

CAS number: 1341-49-7

New Jersey Right To Know Components

Chemical name: Phosphoric acid

CAS number: 7664-38-2

Glycolic acid

CAS-No. 79-14-1

Chemical name: Ammonium biflouride

CAS number: 1341-49-7

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

California Cleaning Product Right to Know Act of 2017 (SB 258)

Chemical Name	CAS Number	Function
Phosphoric acid	7664-38-2	Acidic cleaning agent
Ammonium biflouride	1341-49-7	pH adjustment
Glycolic Acid	79-14-1	Descaling agent

SECTION 16: Other information**Further information/disclaimer**

DISCLAIMER: The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of information for their particular purposes. In no event shall California Correctional Training and Rehabilitation Authority be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, whatsoever arising, even if California Correctional Training and Rehabilitation Authority has been advised of the possibility of such damages.