



**Safety Data Sheet
(SDS)
9977**

SDS Revision Date: 12/08/2022

1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Identity 9977

Alternate Names 9977

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

Intended use Contact ChemStation representative.

Application Method Contact ChemStation representative.

1.3. Details of the supplier of the safety data sheet

Company Name ChemStation
2360 W Dorothy Lane Ste 112
Dayton Dayton, OH 45439

Emergency

CHEMTREC (USA) (800) 424-9300

Customer Service: ChemStation 9375340410

2. Hazard identification of the product

2.1. Classification of the substance or mixture

Acute Tox. 5;H303 May be harmful if swallowed. (Note: this GHS classification was not adopted by US OSHA).

Skin Corr. 1B;H314 Causes severe skin burns and eye damage.

2.2. Label elements



Danger

H303 May be harmful if swallowed.

H314 Causes severe skin burns and eye damage.

[Prevention]:

P260 Do not breathe dust, fume, mist, vapors or spray.

P264 Wash thoroughly after handling.

P280 Wear protective gloves, eye protection, face protection.

[Response]:

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.

P304+312 IF INHALED: Call a poison center or doctor or physician if you feel unwell.

P305+351+338 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, doctor or physician.

P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P363 Wash contaminated clothing before reuse.

[Storage]:

P405 Store locked up.

[Disposal]:

P501 Dispose of contents or container in accordance with local and national regulations.

3. Composition/information on ingredients

Formula information for this product is being withheld as a trade secret under the provisions of 29 CFR 1910.1200(i).

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Phosphoric acid CAS Number: 0007664-38-2	25 - 50	Skin Corr. 1B;H314	[1][2]
Sodium gluconate CAS Number: 0000527-07-1	1.0 - 10	Not Classified	[1]
2-HYDROXY 1, 2, 3 PROPANE TRICARBOXYLIC ACID CAS Number: 0000077-92-9	1.0 - 10	Not Classified	[1]

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

*The full texts of the phrases are shown in Section 16.

Section 4. First-aid measures

4.1. Description of first aid measures

General

In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.

Inhalation

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

Eyes

Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

Skin

Remove contaminated clothing. Wash skin thoroughly with soap and water or use a

recognized skin cleanser.

Ingestion

If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

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

Overview

EFFECTS OF OVEREXPOSURE:

Skin: Direct contact may result in irritation, reddening, swelling, and, if untreated, severe skin damage.

Eyes: Contact may cause severe irritation and corneal damage, if untreated.

INGESTION: May cause burns to the mouth, esophagus, and stomach.

INHALATION: Aerosols and mists may severely damage contacted tissue and produce scarring. Exposure to high concentrations may cause pulmonary edema and chemical pneumonia.

Check section 2.2 (GHS Label Elements) for further details.

Section 5. Fire-fighting measures

5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO₂, powder, water spray.

Unsuitable extinguishing media: Do not use; water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: High temperatures and fires may produce such toxic oxides as those from carbon, sulfur, and phosphorous.

Do not breathe dust, fume, mist, vapors or spray.

5.3. Advice for fire-fighters

Cool closed containers exposed to fire by spraying them with water. Do not allow run off water and contaminants from fire fighting to enter drains or water ways.

ERG Guide No. 154

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.

Contain and absorb spillage with non-combustible materials e.g. sand, earth, vermiculite. Place in closed containers outside buildings and dispose of according to the Waste Regulations. (See section 13).

Clean, preferably with a detergent. Do not use solvents.

Do not allow spills to enter drains or watercourses.

If drains, sewers, streams or lakes are contaminated, inform the local water company immediately. In the case of contamination of rivers, streams or lakes the Environmental Protection Agency should also be informed.

Neutralize residual product in the spill area using sodium carbonate or sodium bicarbonate.

Section 7. Handling and storage

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.

Check section 2.2 (GHS Label Elements) for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials: Avoid contact with chlorinated products, reducing agents, alkalis, reactive metals, and metal oxides.

Store away from oxidizers and alkalines.

Check section 2.2 (GHS Label Elements) for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

Section 8. Exposure controls / personal protection

8.1. Control Parameters - Formula information for this product is being withheld as a trade secret under the provisions of 29 CFR 1910.1200(i).

Exposure

CAS No.	Ingredient	Source	Value
0000077-92-9	2-HYDROXY 1, 2, 3 PROPANE TRICARBOXYLIC ACID	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0000527-07-1	Sodium gluconate	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit
0007664-38-2	Phosphoric acid	OSHA	TWA 1 mg/m3
		ACGIH	TWA: 1 mg/m3 STEL: 3 mg/m3
		NIOSH	TWA 1 mg/m3 ST 3 mg/m3
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000077-92-9	2-HYDROXY 1, 2, 3 PROPANE TRICARBOXYLIC ACID	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0000527-07-1	Sodium gluconate	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
0007664-38-2	Phosphoric acid	OSHA	Regulated Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

8.2. Exposure controls

Respiratory	If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.
Eyes	Wear a full face shield if mixing or pouring this material.
Skin	Overalls which cover the body, arms and legs should be worn. Skin should not be exposed. All parts of the body should be washed after contact. Use neoprene or rubber gloves.
Engineering Controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices	An eyewash fountain should be located in areas where the product is used. Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Check section 2.2 (GHS Label Elements) for further details. - [Prevention]:

Section 9. Physical and chemical properties

Appearance	Clear, colorless thin liquid
Odor	Mild
Odor threshold	Not Measured
pH	0.1 - 0.7
Melting point / freezing point	Not Measured
Initial boiling point and boiling range	212 deg F
Flash Point	>200 degrees F PMCC (non-flammable)
Evaporation rate (Ether = 1)	0.33
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: Not Measured Upper Explosive Limit: Not Measured
Vapor pressure (Pa)	Not Determined
Vapor Density	Not Determined
Relative Density	1.277 - 1.287
Solubility in Water	Not Measured
Partition coefficient n-octanol/water (Log Kow)	Not Measured
Auto-ignition temperature	Not Measured
Decomposition temperature	Not Measured
Viscosity (cSt)	Not Measured
Foaming	Moderate

9.2. Other information

No other relevant information.

Section 10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

High temperatures, flames, and incompatibles.

Do not store near chlorine-containing compounds.

10.5. Incompatible materials

Avoid contact with chlorinated products, reducing agents, alkalis, reactive metals, and metal oxides.

10.6. Hazardous decomposition products

High temperatures and fires may produce such toxic oxides as those from carbon, sulfur, and phosphorous.

Section 11. Toxicological information

Accute Toxicity - Formula information for this product is being withheld as a trade secret under the provisions of 29 CFR 1910.1200(i).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Phosphoric acid - (7664-38-2)	1,700.00, Rat - Category: 4	>2,000.00, Rabbit - Category: 5	No data available	No data available	No data available
Sodium gluconate - (527-07-1)	No data available	No data available	No data available	No data available	No data available
2-HYDROXY 1, 2, 3 PROPANE TRICARBOXYLIC ACID - (77-92-9)	5,400.00, Mouse - Category: NA	>2,000.00, Rat - Category: 5	No data available	No data available	No data available

Classification	Category	Hazard Description
Acute toxicity (oral)	5	May be harmful if swallowed. (Note: this GHS classification was not adopted by US OSHA).
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	1B	Causes severe skin burns and eye damage.
Serious eye damage/irritation	---	Not Applicable
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

Section 12. Ecological information

12.1. Toxicity - Formula information for this product is being withheld as a trade secret under the provisions of 29 CFR 1910.1200(i).

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Phosphoric acid - (7664-38-2)	75.10, Oryzias latipes	101.00, Daphnia magna	101.00 (72 hr), Desmodesmus subspicatus
Sodium gluconate - (527-07-1)	Not Available	Not Available	Not Available
2-HYDROXY 1, 2, 3 PROPANE TRICARBOXYLIC ACID - (77-92-9)	101.00, Pimephales promelas	160.00, Carcinus maenas	Not Available

12.2. Persistence and degradability

This product is fully biodegradable.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

Section 13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

Section 14. Transport information

14.1. UN number

NA1760

14.2. UN proper shipping name

Compound, Cleaning, Liquid, (Phosphoric Acid)

14.3. Transport hazard class(es)

8

14.4. Packing group

III

Section 15. Regulatory information

Regulatory Overview The regulatory data in Section 15 is not intended to be all-inclusive, only selected

regulations are represented.

Toxic Substance Control Act (TSCA) All components of this material are either listed or exempt from listing on the TSCA Inventory.

EPCRA 311/312 Chemicals and RQs (lbs):

Phosphoric acid (5,000.00)

EPCRA 302 Extremely Hazardous :

(No Product Ingredients Listed)

EPCRA 313 Toxic Chemicals:

(No Product Ingredients Listed)

Proposition 65 - Carcinogens (>0.0%):

(No Product Ingredients Listed)

Proposition 65 - Developmental Toxins (>0.0%):

(No Product Ingredients Listed)

Proposition 65 - Female Repro Toxins (>0.0%):

(No Product Ingredients Listed)

Proposition 65 - Male Repro Toxins (>0.0%):

(No Product Ingredients Listed)

N.J. RTK Substances (>1%):

Phosphoric acid

Penn RTK Substances (>1%):

Phosphoric acid

Section 16. Other information

Issue Date	04/22/2015 06/18/2015 04/21/2016 09/16/2018 05/05/2022
Revision History	997704/22/2015 06/18/2015 04/21/2016 09/16/2018 05/05/2022

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H314 Causes severe skin burns and eye damage.

End of Document

**Heavy Duty,
Acid Cleaner**

9977
**Stainless Steel Cleaner/Rust
Remover**

PRODUCT DESCRIPTION

- ◆ ChemStation 9977 is a highly concentrated, acid cleaner formulated specifically for use in descaling and general purpose applications.
- ◆ It can be used to remove a wide range of soils on painted surfaces, aluminum, and chrome plated steel.
- ◆ ChemStation 9977 is a balanced blend of biodegradable surfactants, water conditioners and acid builders. It generates low foam that clings to vertical surfaces, and rinses easily.

FEATURES

- ◆ High Reserve Acidity Effective on grease, oil, and road film.
- ◆ Liquid..... Convenient to use, easy dispensing and controlling.
- ◆ Self-Foaming..... Effectively penetrates and removes hard water deposits.

BENEFITS

TYPICAL INSPECTIONS

- ◆ Appearance Clear liquid
- ◆ Color Clear
- ◆ Odor Mild
- ◆ Solubility Complete
- ◆ pH neat..... 0.4
- ◆ Specific Gravity 1.282
- ◆ Foaming Low (No foam above 120 degrees F.)
- ◆ Flash Point >200°F (nonflammable)

DILUTION

- ◆ 1-10% typical.
- ◆ Consult sales representative for recommendation.

SAFETY

- ◆ Keep out of the reach of children. For industrial and commercial use only.
- ◆ Material Safety Data Sheets available with delivery or upon request.
- ◆ Read label instructions and MSDS carefully.



December 9, 2022

This letter concerns the compound authorization of ChemStation Product 9977.

When used according to label directions, this product is safe and suitable for use in a USDA inspected facility, as a cleaning agent on all surfaces, or for use with steam or mechanical cleaning devices, in all departments of official establishments operating under the Federal meat, poultry, shell egg grading, and egg products inspection programs.

Before using this compound, food products and packaging materials must be removed from the room or carefully protected. After using this compound, surfaces must be thoroughly rinsed with potable water.

When used according to label directions, this product meets the requirements of 21 CFR117.35 (b) Substances used in Cleaning and Sanitizing; Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food.

Sincerely,

Benjamin Laux
Director R&D
ChemStation International