



Safety Data Sheet (SDS) 9590

SDS Revision Date: 02/20/2024

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

1.1. Product identifier

Product Identity 9590

Alternate Names 9590

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, OH 45439

Emergency

CHEMTREC (USA) (800) 424-9300

Customer Service: ChemStation (937) 534-0410

2. Hazard identification of the product

2.1. Classification of the substance or mixture

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

2.2. Label elements



Danger

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+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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.

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 | 1.0 - 10 | Skin Corr. 1B;H314 | [1][2] |
| Nitric acid CAS Number: 0007697-37-2 | 1.0 - 10 | Ox. Liq. 3;H272 Skin Corr. 1A;H314 | [1][2] |

[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 fresh water for at least 15 minutes, holding the eyelids apart and seek medical attention.

Skin

Immediately flush the area with large amounts of water for at least 15 minutes, while removing contaminated clothing. Launder clothing before re-use. Call a physician.

Ingestion

Do NOT induce vomiting. Rinse mouth and slowly drink several glasses of water. Call a physician. Do NOT give anything by mouth to an unconscious or convulsing person.

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 harmful to fatal chemical 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: Oxides of carbon and nitrogen.

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

Store in a cool dry place.

Incompatible materials: This product will liberate flammable hydrogen gas when in contact with most metals. Avoid contact with cyanides, sulfides, sulfites, chlorine or chlorine bleaches, which would release toxic gases. Avoid contact with strong alkalis and mild steel.

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 |
|--------------|----------------------|----------|---|
| 0007664-38-2 | Phosphoric acid | OSHA | TWA 1 mg/m ³ |
| | | ACGIH | TWA: 1 mg/m ³ STEL: 3 mg/m ³ |
| | | NIOSH | TWA 1 mg/m ³ ST 3 mg/m ³ |
| | | Supplier | No Established Limit |
| 0007697-37-2 | Nitric acid | OSHA | TWA 2 ppm (5 mg/m ³) |
| | | ACGIH | TWA: 2 ppm Ceiling: 4 ppm |
| | | NIOSH | TWA 2 ppm (5 mg/m ³) ST 4 ppm (10 mg/m ³) |
| | | Supplier | No Established Limit |
| ACGIH | No Established Limit | | |
| NIOSH | No Established Limit | | |
| Supplier | No Established Limit | | |
| ACGIH | No Established Limit | | |
| NIOSH | No Established Limit | | |
| Supplier | No Established Limit | | |

Carcinogen Data

| CAS No. | Ingredient | Source | Value |
|--------------|--|--------|--|
| 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; |
| 0007697-37-2 | Nitric 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; |
| NTP | Known: No; Suspected: No | | |
| IARC | Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: 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 safety glasses with side shields. Chemical safety goggles and face shield should be used if splash hazard exists. Eyewash fountain should be located in the immediate work area.

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 liquid |
| Odor | Mild |
| Odor threshold | Not Measured |
| pH | 0.1 - 0.6 |
| 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 | 1.079 - 1.089 |
| 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 cyanide or chlorine-containing compounds.

10.5. Incompatible materials

This product will liberate flammable hydrogen gas when in contact with most metals. Avoid contact with cyanides, sulfides, sulfites, chlorine or chlorine bleaches, which would release toxic gases. Avoid contact with strong alkalis and mild steel.

10.6. Hazardous decomposition products

Oxides of carbon and nitrogen.

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 |

| | | | | | |
|-------------------------------|-------------------|--|-------------------|------------------------------|-------------------|
| Nitric acid - (7697-37-2) | No data available | No data available | No data available | 2,500.00, Rat - Category: NA | No data available |
| Classification | Category | Hazard Description | | | |
| Acute toxicity (oral) | --- | Not Applicable | | | |
| 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 |
| Nitric acid - (7697-37-2) | 6,650.00, Gambusia affinis | 490.00, Daphnia magna | 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):

Nitric acid (1,000.00)

Phosphoric acid (5,000.00)

EPCRA 302 Extremely Hazardous:

Nitric acid

EPCRA 313 Toxic Chemicals:

Nitric acid

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%):

Nitric acid

Phosphoric acid

Penn RTK Substances (>1%):

Nitric acid

Phosphoric acid

Section 16. Other information

Issue Date 07/01/2015

Revision History

| |
|------------|
| 07/01/2015 |
| 11/30/2015 |
| 08/15/2018 |
| 09/16/2018 |
| 05/02/2022 |
| 09/29/2022 |
| 10/11/2022 |
| 11/07/2022 |
| 12/07/2022 |
| 01/05/2023 |
| 04/03/2023 |
| 08/19/2023 |
| 02/20/2024 |

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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:

H272 May intensify fire; oxidizer.

H314 Causes severe skin burns and eye damage.

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