SAFETY DATA SHEET

Version: v1 Revision Date: 2024-01-20 Print Date: 2024-01-26

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

1.1 Product identifiers

| Product name | : Nitrosyl tetrafluoroborate |
|----------------|------------------------------|
| Product Number | : N167353 |
| Brand | : aladdin |
| CAS-No. | : 14635-75-7 |

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

| Identified uses : Laboratory chemicals, Manufacture of substance | Identified uses | : Laboratory chemicals,Manufacture of substances. |
|--|-----------------|---|
|--|-----------------|---|

1.3 Company

| Company | : ALADDIN SCIENTIFIC CORPORATION |
|----------------------|----------------------------------|
| Address | : 14078 Meridian Parkway, |
| Riverside, CA. 92518 | |
| Telephone | : +1 (833) 552-7181 |
| Fax | : no data available |
| | |

1.4 Emergency telephone number

| CHEMTREC®, Inside the USA | : 1-800-424-9300 |
|----------------------------|------------------|
| CHEMTREC®, Outside the USA | : |

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Skin corrosion (Sub-category 1B), H314

2.2 GHS Label elements, including precautionary statements

| Pictogram | |
|----------------------------|--|
| Signal word | Danger |
| Hazard statement(s) | |
| H314 | Causes severe skin burns and eye damage |
| Precautionary statement(s) | |
| P260 | Do not breathe dust/fume/gas/mist/vapors/spray. |
| P264 | Wash hands [and] thoroughly after handling. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |



95%

| P310 | Immediately call a POISON CENTER or doctor/physician. |
|----------------|--|
| P363 | Wash contaminated clothing before reuse. |
| 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]. |
| 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. |
| P405 | Store locked up. |
| P501 | Dispose of contents/container to an approved waste disposal plant. |

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

SECTION 3: Composition/information on ingredients

| 3.1 | Substances | | | |
|------|------------------|----------------|---------------------------------|---------------|
| | Synonyms | | : Nitrosonium tetrafluoroborate | |
| | Formula | | : NOBF4 | |
| | Molecular weight | | : 116.81 | |
| | CAS No. | | : 14635-75-7 | |
| | EC-NO. | | : no data available | |
| Comp | oonent | Classification | | Concentration |

Nitrosyl tetrafluoroborate

no data available

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician.Show this safety data sheet to the doctor in attendance.Move out of dangerous area.Hydrofluoric (HF) acid burns require immediate and specialized first aid and medical treatment.Symptoms may be delayed up to 24 hours depending on the concentration of HF.After decontamination with water, further damage can occur due to penetration/absorption of the fluoride ion.Treatment should be directed toward binding the fluoride ion as well as the effects of exposure.Skin exposures can be treated with a 2.5% calcium gluconate gel repeated until burning ceases.More serious skin exposures may require subcutaneous calcium gluconate except for digital areas unless the physician is experienced in this technique, due to the potential for tissue injury from increased pressure.Absorption can readily occur through the subungual areas and should be considered when undergoing decontamination.Prevention of absorption of the fluoride ion in cases of ingestion can be obtained by giving milk, chewable calcium carbonate tablets or Milk of Magnesia to conscious victims.Conditions such as hypocalcemia, hypomagnesemia and cardiac arrhythmias should be monitored for, since they can occur after exposure.

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If inhaled If breathed in, move person into fresh air.If not breathing, give artificial respiration.Consult a physician. In case of skin contact Take off contaminated clothing and shoes immediately.Wash off with soap and plenty of water.Consult a physician.First treatment with calcium gluconate paste. In case of eye contact Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.Continue rinsing eyes during transport to hospital. If swallowed Do NOT induce vomiting.Never give anything by mouth to an unconscious person.Rinse mouth with water.Consult a

4.2 Most important symptoms and effects, both acute and delayed

no data available

physician.

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Carbon dioxide (CO2) Dry powder Unsuitable extinguishing media no data available

5.2 Special hazards arising from the substance or mixture

Nitrogen oxides (NOx) Hydrogen fluoride Borane/boron oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

no data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up



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Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid formation of dust and aerosols.Further processing of solid materials may result in the formation of combustible dusts.The potential for combustible dust formation should be taken into consideration before additional processing occurs.Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.Recommended storage temperature 2 - 8 °C Air and moisture sensitive.Store under inert gas.Keep in a dry place.Do not store in glass Storage class (TRGS 510): 8B: Non-combustible, corrosive hazardous materials

7.3 Specific end use(s)

no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves.Gloves must be inspected prior to use.Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product.Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.Wash and dry hands. Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface particle respirator type

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N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Control of environmental exposure no data available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| a) Appearance | form: Solid color: White to Yellow |
|--|------------------------------------|
| b) Odour | no data available |
| c) Odour Threshold | no data available |
| d) pH | no data available |
| e) Melting point/freezing point | no data available |
| f) Initial boiling point and boiling range | no data available |
| g) Flash point | no data available |
| h) Evaporation rate | no data available |
| i) Flammability (solid, gas) | no data available |
| j) Upper/lower flammability or | |
| explosive limits | no data available |
| k) Vapour pressure | no data available |
| l) Vapour density | no data available |
| m) Relative density | no data available |
| n) Water solubility | no data available |
| o) Partition coefficient: n-octanol/water | no data available |
| p) Auto-ignition temperature | no data available |
| q) Decomposition temperature | no data available |
| r) Viscosity | no data available |
| s) Explosive properties N | no data available |
| t) Oxidizing properties N | no data available |
| | |

9.2 Other safety information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

no data available

10.3 Possibility of hazardous reactions

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no data available

10.4 Conditions to avoid

Reacts dangerously with glass.

- 10.5 Incompatible materials glass
- 10.6 Hazardous decomposition products no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Skin corrosion/irritation no data available Serious eye damage/eye irritation no data available Respiratory or skin sensitisation no data available Germ cell mutagenicity no data available Carcinogenicity no data available Reproductive toxicity no data available Specific target organ toxicity - single exposure no data available Specific target organ toxicity - repeated exposure no data available Aspiration hazard no data available Additional Information Fluoride ion can reduce serum calcium levels possibly causing fatal hypocalcemia.

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

SECTION 12: Ecological information

12.1 Toxicity

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no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no data available

SECTION 13:

13.1 Disposal considerations

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.Contact a licensed professional waste disposal service to dispose of this material.Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Contaminated packaging Dispose of as unused product.

SECTION 14: Transport information

| DOT (US) | | | | |
|---|---|--|--|--|
| UN number: 3260 | Packing group: II | Class: 8 | | |
| Proper shipping name: Corrosive solid, acidic, inorganic, n.o.s. (nitrosyl tetrafluoroborate) | Reportable Quantity(RQ): no data available | Poison Inhalation Hazard: no data available | | |
| Environmental Hazards: no | | | | |
| IMDG | | | | |
| UN number: 3260 | Packing group: II | EMS-No: no data available | | |
| Proper shipping name: Corrosive solid, acidic, inorganic, n.o.s. (nitrosyl tetrafluoroborate) | | | | |
| ΙΑΤΑ | | | | |
| UN number: 3260 | Packing group: II | Class: 8 | | |
| Proper shipping name: Corrosive solid, | acidic, inorganic, n.o.s. (nitrosyl tetrafluc | proborate) | | |

SECTION 15: Regulatory information

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This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

SECTION 16: Other information

| Regulatory Affairs ALADDIN SCIENTIFIC CORPORATION Email: QualityAssurance@aladdinsci.com |
|--|
| 10-Sep-2020 |
| 20-Jan-2024 |
| 26-Jan-2024 |
| SDS sections updated v1 |
| |

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