

No. 809, Chuhua Branch Road, Fengxian District, Shanghai

SAFETY DATA SHEET

Version: v1

Revision Date: 2023-12-06

Print Date: 2023-12-08

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

1.1 Product identifiers

Product name : Nitric acid
Product Number : N116240
Brand : aladdin
CAS-No. : 7697-37-2

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

Identified uses : Laboratory chemicals, Manufacture of substances.

1.3 Details of the supplier of the safety data sheet

Company : Shanghai Aladdin Biochemical Tech Co.,Ltd

Address : 36 Xinjinqiao Road, Shanghai

Telephone : 400-620-6333
Fax : no data available

1.4 Emergency telephone number

Emergency Phone : 0532-83889090

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Oxidizing liquid (class 3), H272

Metal corrosion products (category 1), H290

Acute toxicity, inhalation (category 3), H331

Skin corrosion/irritation (Category 1A), H314

Serious eye injury/eye irritation (category 1), H318

2.2 GHS Label elements, including precautionary statements

Pictogram





Signal word

Hazard statement(s)

ord Danger



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H272 May intensify fire; oxidizer H290 May be corrosive to metals

H314 Causes severe skin burns and eye damage

H331 Toxic if inhaled

Precautionary statement(s)

P210 Keep away from heat, hot surface, sparks, open flames and other ignition

sources. - No smoking.

P220 Keep away from clothing and other combustible materials.
P221 Take any precaution to avoid mixing with combustibles/...

P234 Keep only in original container.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash hands [and ...] thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P310 Immediately call a POISON CENTER or doctor/physician.

P363 Wash contaminated clothing before reuse.

P370 In case of fire:
P378 Use ... to extinguish.

P390 Absorb spillage to prevent material damage.

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.

P406 Store in corrosive resistant/... container with a resistant inner liner.
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P410+P403 Protect from sunlight. Store in a well-ventilated place.

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

3.2 Mixtures

Synonyms : Fuming nitric acid; nitric acid; hydrogen nitrogen water

Formula : HN03 Molecular weight : 63.01

Component Classification Concentration



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Component	Classification	Concentration
Nitric acid		
CAS-No.: 7697-37-2 EC-No.: 231-714-2	Oxidizing liquid category 3; Metal corrosion category 1; Acute toxicity category 3; Skin corrosion/irritation category 1A; Serious eye injury/eye irritation category 1; H272, H290, H331, H314, H318 concentration limit: > = 1 %: Met. Corr. 1, H290; 0 - < 70.0001 %: Acute Tox. 3, H331; >= 70.0001 %: Acute Tox. 1, H330;	65-68%

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this material safety data sheet to the doctor in attendance.

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. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

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

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

Dry powder Dry sand

Unsuitable extinguishing media

no data available

5.2 Special hazards arising from the substance or mixture

Nitrogen oxides (NOx) Not combustible.

5.3 Advice for firefighters



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Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place.avoid light

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



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workday.

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 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 glove's 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. The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Body Protection

Impervious clothing, 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 respirator with multipurpose combination (US) or type ABEK (EN 14387) 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

If safety requires, prevent further leakage or spillage. Do not let the product enter the sewer.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Appearance	no data available
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 120.5°C

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

k) Vapour pressure

l) Vapour density

m) Relative density

n) Water solubility

o) Partition coefficient: n-octanol/water no data available

p) Auto-ignition temperature

q) Decomposition temperature

no data available

no data available

no data available

no data available



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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

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

May discolor on exposure to air and light.

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Skin corrosion/irritation

Skin-Rabbit Results: Severe burns were caused. Note: (IUCLID) causes wounds that are difficult to heal.

Serious eye damage/eye irritation

Eye-rabbit result: burn. Note: (IUCLID) causes serious eye injury

Respiratory or skin sensitisation

no data available

Germ cell mutagenicity

Test type: Ames test system: Salmonella typhimurium result: negative

Carcinogenicity no data available Reproductive toxicity



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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

Toxic effect registration of chemical substances: QU5775000

As far as we know, the chemical, physical and toxic properties have not been completely studied.

SECTION 12: Ecological information

12.1 Toxicity

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

PBT/vPvB assessment is unavailable because chemical safety assessment is not required/conducted.

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. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information



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DOT (US)

UN number: 2031 Packing group: II Class: 8

Proper shipping name: Nitric acid Reportable Quantity(RQ): no data Poison Inhalation Hazard: no data

available available

Environmental Hazards: NO

IMDG

UN number: 2031 Packing group: II EMS-No: no data available

Proper shipping name: Nitric acid

IATA

UN number: 2031 Packing group: II Class: 8

Proper shipping name: Nitric acid

SECTION 15: Regulatory information

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

SECTION 16: Other information

Further information

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