

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Version 7.0 Revision Date 03.03.2016

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GENERIC EU MSDS - NO COUNTRY SPECIFIC DATA - NO OEL DATA

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifiers**

Product name : Nitric acid

Product Number : 438073

Brand : Sigma-Aldrich

Index-No. : 007-004-00-1

REACH No. : 01-2119487297-23-XXXX

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 : Sigma-Aldrich Israel Ltd.
3 PARK RABIN, PLAUT
7670603 REHOVOT
ISRAEL

Telephone : +972 8948-4222

Fax : +972 8948-4200

1.4 Emergency telephone number

Emergency Phone # +972 (8) 948-4222

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

Oxidizing liquids (Category 3), H272
Corrosive to metals (Category 1), H290
Skin corrosion (Category 1A), H314

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 Label elements**Labelling according Regulation (EC) No 1272/2008**

Pictogram



Signal word

Danger

Hazard statement(s)

H272

May intensify fire; oxidizer.

H290

May be corrosive to metals.

H314

Causes severe skin burns and eye damage.

Precautionary statement(s)

P210

Keep away from heat, hot surfaces, sparks, open flames and other

P220	ignition sources. No smoking.
P260	Keep/Store away from clothing/ combustible materials.
P280	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P305 + P351 + P338	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P370 + P378	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. In case of fire: Use dry powder or dry sand to extinguish.

Supplemental Hazard information (EU)

EUH071 Corrosive to the respiratory tract.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Formula : HNO₃
Molecular weight : 63,01 g/mol

Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
Nitric acid		
CAS-No. 7697-37-2	Ox. Liq. 2; Met. Corr. 1; Skin Corr. 1A; H272, H290, H314 Concentration limits: >= 20 %: Skin Corr. 1A, H314; 5 - < 20 %: Skin Corr. 1B, H314; 65 - < 99 %: Ox. Liq. 3, H272; >= 99 %: Ox. Liq. 2, H272; 1 - < 3 %: Eye Irrit. 2A, H319; 3 - < 5 %: 1, H318; >= 1 %: Met. Corr. 1, H290; 1 - < 5 %: Skin Irrit. 2, H315;	>= 70 - < 80 %
EC-No. 231-714-2		
Index-No. 007-004-00-1		
Registration number 01-2119487297-23-XXXX		

For the full text of the H-Statements mentioned in this Section, see Section 16.

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.

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.

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

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

No data available

5.3 Advice for firefighters

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

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local 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 inhalation of vapour or mist. Keep away from sources of ignition - No smoking. Keep away from heat and sources of ignition. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. 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. Storage class (TRGS 510): Oxidizing hazardous materials

7.3 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

8.1 Control parameters

Components with workplace control parameters

Derived No Effect Level (DNEL)

Application Area	Exposure routes	Health effect	Value
Workers	Inhalation	Acute local effects	2,6 mg/m ³

b) Odour	No data available
c) Odour Threshold	No data available
d) pH	< 1,0
e) Melting point/freezing point	No data available
f) Initial boiling point and boiling range	120,5 °C - lit.
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	49 hPa at 50 °C
l) Vapour density	No data available
m) Relative density	1,413 g/cm ³ at 20 °C
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	No data available
t) Oxidizing properties	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

No data available

10.5 Incompatible materials

Alkali metals, Organic materials, Acetic anhydride, Acetonitrile, Alcohols, Acrylonitrile, Ammonia, Crotonaldehyde, Halogenated hydrocarbon, Acids, Bases, Metals, hexalithium disilicide, Hydrogen peroxide, Ketones, metal acetylides, Water, Fluorine, Amines, Thiols, cadmium, Bromine, Copper, Hydrazine, Hydrazinium nitrate, Nitro compounds, Cyanides, Phosphorus trihydride (phosphine), Diphosphine, Halides, Organic halides, May set fire to wood or paper., Polyethers, Methyl vinyl ether

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Nitrogen oxides (NO_x)
Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

No data available

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

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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

RTECS: Not available

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Inhalation may provoke the following symptoms:, spasm, inflammation and edema of the bronchi, spasm, inflammation and edema of the larynx, pneumonitis, pulmonary edema, Symptoms and signs of poisoning are:, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Pulmonary edema. Effects may be delayed., Large doses may cause: conversion of hemoglobin to methemoglobin, producing cyanosis; marked fall in blood pressure, leading to collapse, coma, and possibly death.

Liver - Irregularities - Based on Human Evidence (Nitric acid)

SECTION 12: Ecological information

12.1 Toxicity

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

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dispose of as hazardous waste in compliance with local and national regulations.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

ADR/RID: 2031

IMDG: 2031

IATA: 2031

14.2 UN proper shipping name

ADR/RID: NITRIC ACID

IMDG: NITRIC ACID

IATA: Nitric acid

Passenger Aircraft: Not permitted for transport

14.3 Transport hazard class(es)

ADR/RID: 8 (5.1)

IMDG: 8 (5.1)

IATA: 8 (5.1)

14.4 Packaging group

ADR/RID: II

IMDG: II

IATA: II

14.5 Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

14.6 Special precautions for user

No data available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

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

15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

EUH071	Corrosive to the respiratory tract.
H272	May intensify fire; oxidizer.
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.

Further information

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