

# **SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006

Version 6.5 Revision Date 27.10.2021 Print Date 29.08.2022

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 : Nitrate Reagent A

Product Number : 38497

Brand : Sigma-Aldrich

REACH No. : This product is a mixture. REACH Registration Number see

section 3.

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 Chemical Pvt Limited

Industrial Area, Anekal Taluka

Plot No 12,

12 Bommasandra - Jigani Link Road

560100 BANGALORE

**INDIA** 

1.4 Emergency telephone

Emergency Phone # : +91 98802 05043

#### **SECTION 2: Hazards identification**

# 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

Skin corrosion (Sub-category 1B), H314 Serious eye damage (Category 1), H318

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)

H314 Causes severe skin burns and eye damage.

Sigma-Aldrich- 38497 Page 1 of 11



Precautionary statement(s)	
P280	Wear protective gloves/ protective clothing/ eye protection/ face
	protection/ hearing protection.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P363	Wash contaminated clothing before reuse.
P405	Store locked up.
Supplemental Hazard Statements	none

# 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. Lachrymator.

# **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

Synonyms : 1-Naphthylamine

Component		Classification	Concentration
acetic acid			
acetic acid  CAS-No. EC-No. Index-No. Registration number	64-19-7 200-580-7 607-002-00-6 01-2119475328-30- XXXX	Flam. Liq. 3; Skin Corr. 1A; Eye Dam. 1; H226, H314, H318 Concentration limits: >= 90 %: Skin Corr. 1A, H314; 25 - < 90 %: Skin Corr. 1B, H314; 10 - < 25 %: Skin Irrit. 2, H315; 10 - < 25 %: Eye Irrit. 2, H319; 10 - < 25 %: Eye Irrit. 2, H319; 10 - < 25 %: Skin Irrit. 2, H315; 25	>= 30 - < 50 %
		- < 90 %: Skin Corr. 1B, H314; >= 90 %: Skin Corr. 1A, H314; >= 90 %: 3, H226;	

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

A

Sigma-Aldrich- 38497 Page 2 of 11

#### **SECTION 4: First aid measures**

# 4.1 Description of first-aid measures

#### **General advice**

First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance.

#### If inhaled

After inhalation: fresh air. Call in physician.

#### In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

#### In case of eye contact

After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

#### If swallowed

After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

# 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

Water Foam Carbon dioxide (CO2) Dry powder

#### Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

#### 5.2 Special hazards arising from the substance or mixture

Carbon oxides

Mixture with combustible ingredients.

Development of hazardous combustion gases or vapours possible in the event of fire.

#### 5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

#### **5.4** Further information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

A

Sigma-Aldrich- 38497 Page 3 of 11

#### SECTION 6: Accidental release measures

# 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

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

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.

#### 6.4 Reference to other sections

For disposal see section 13.

#### **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

For precautions see section 2.2.

# 7.2 Conditions for safe storage, including any incompatibilities

## Storage conditions

Tightly closed. Keep locked up or in an area accessible only to qualified or authorized persons.

Moisture sensitive.

#### Storage class

Storage class (TRGS 510): 8A: Combustible, corrosive 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

**Ingredients with workplace control parameters** 

# 8.2 Exposure controls

# **Personal protective equipment**

# Eye/face protection

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

#### 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.

Sigma-Aldrich- 38497 Page 4 of 11



The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,4 mm Break through time: 480 min

Material tested: Camatril® (KCL 730 / Aldrich Z677442, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 60 min

Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail

sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the EC approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

# **Body Protection**

protective clothing

#### Respiratory protection

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type ABEK

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

#### Control of environmental exposure

Do not let product enter drains.

# **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

a) Appearance Form: clear, liquid

Color: light red

b) Odor
c) Odor Threshold
d) pH
e) Melting
No data available
No data available
No data available

point/freezing point

f) Initial boiling point No data available and boiling range

g) Flash point No data available

Sigma-Aldrich- 38497 Page 5 of 11

A

h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapor pressure	No data available
l)	Vapor density	No data available
m)	Density	No data available
	Relative density	No data available
n)	Water solubility	at 20 °C soluble
0)	Partition coefficient: n-octanol/water	No data available
p)	Autoignition	No data available

p) Autoignition N temperature

q) Decomposition temperature

No data available

r) Viscosity Viscosity, kinematic: No data available Viscosity, dynamic: No data available

s) Explosive properties Not classified as explosive.

t) Oxidizing properties none

# 9.2 Other safety information

No data available

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

No data available

# 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

# 10.3 Possibility of hazardous reactions

Violent reactions possible with:

The generally known reaction partners of water.

#### 10.4 Conditions to avoid

Avoid moisture.

no information available

#### 10.5 Incompatible materials

Peroxides, permanganates, for example potassium permanganate, Amines, Alcohols

#### 10.6 Hazardous decomposition products

In the event of fire: see section 5

Sigma-Aldrich- 38497 Page 6 of 11



# **SECTION 11: Toxicological information**

# 11.1 Information on toxicological effects

#### **Mixture**

# **Acute toxicity**

Oral: No data available

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of

respiratory tract

Dermal: No data available

Skin corrosion/irritation

No data available

Mixture causes burns.

#### Serious eye damage/eye irritation

No data available

Mixture causes serious eye damage. Risk of blindness!

# Respiratory or skin sensitization

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

#### 11.2 Additional Information

#### **Endocrine disrupting properties**

#### **Product:**

Assessment The substance/mixture does not contain

components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

Sigma-Aldrich- 38497 Page 7 of 11

The life science business of Merck operates as MilliporeSigma in the US and Canada

## **Components**

#### acetic acid

#### **Acute toxicity**

LD50 Oral - Rat - 3.310 mg/kg

Remarks: (RTECS)

LC50 Inhalation - Mouse - 4 h - 2.819 mg/l - vapor

Remarks: (RTECS)

Dermal: No data available

Skin corrosion/irritation

Skin - Rabbit

Result: Causes burns. - 4 h (OECD Test Guideline 404)

Remarks: (IUCLID)

# Serious eye damage/eye irritation

Eyes - Rabbit

Result: Causes burns. - 4 h (OECD Test Guideline 405)

Remarks: (IUCLID)

Causes serious eye damage.

# Respiratory or skin sensitization

No data available

#### Germ cell mutagenicity

Test Type: Ames test

Test system: Salmonella typhimurium

Result: negative

Test Type: Mutagenicity (mammal cell test): chromosome aberration.

Test system: Chinese hamster ovary cells

Result: negative

Method: Mutagenicity (micronucleus test) Species: Rat - male and female - Bone marrow

Result: negative **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



Sigma-Aldrich- 38497 Page 8 of 11

#### **SECTION 12: Ecological information**

# 12.1 Toxicity

#### **Mixture**

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 Endocrine disrupting properties

#### **Product:**

Assessment : The substance/mixture does not contain components

considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

#### 12.7 Other adverse effects

No data available

#### **Components**

#### acetic acid

Toxicity to fish semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) -

> 1.000 mg/l - 96 h

(OECD Test Guideline 203)

Toxicity to daphnia

and other aquatic

invertebrates

static test EC50 - Daphnia magna (Water flea) - > 1.000 mg/l

- 48 h

(OECD Test Guideline 202)

Toxicity to algae static test EC50 - Skeletonema costatum - > 1.000 mg/l - 72 h

(ISO 10253)

Toxicity to bacteria EC5 - Pseudomonas putida - 2.850 mg/l - 16 h

Remarks: neutral

(maximum permissible toxic concentration)

(Lit.)

microtox test EC50 - Photobacterium phosphoreum - 11 mg/l -

15 min

Remarks: (IUCLID)

A

Sigma-Aldrich- 38497 Page 9 of 11

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Product**

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions.

# **SECTION 14: Transport information**

#### 14.1 UN number

ADR/RID: 2790 IMDG: 2790 IATA: 2790

## 14.2 UN proper shipping name

ADR/RID: ACETIC ACID SOLUTION IMDG: ACETIC ACID, SOLUTION IATA: Acetic acid solution

# 14.3 Transport hazard class(es)

ADR/RID: 8 IMDG: 8 IATA: 8

# 14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

#### 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 material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### Other regulations

Take note of Dir 94/33/EC on the protection of young people at work.

#### 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

# **SECTION 16: Other information**

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

H226 Flammable liquid and vapor. H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.

# **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the

Sigma-Aldrich- 38497 Page 10 of 11

A

present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

Copyright 2020 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only.

The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the product ordered. For further information please contact mlsbranding@sial.com.

Sigma-Aldrich- 38497 Page 11 of 11



The life science business of Merck operates as MilliporeSigma in the US and Canada