

# SAFETY DATA SHEET

Version 8.3 Revision Date 23.12.2021 Print Date 16.02.2022

## SECTION 1: Identification of the hazardous chemical and of the supplier

1.1 Product identifiers

Product name : Sodium Sulfate Anhydrous

Product Number : PHR2658
Brand : Sigma-Aldrich
CAS-No. : 7757-82-6

1.2 Other means of identification

No data available

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

Identified uses : For R&D use only. Not for pharmaceutical, household or other

uses.

1.4 Details of the supplier of the safety data sheet

Company : SIGMA-ALDRICH (M) SDN BHD

Level 3, Menara Sunway Annexe, Jalan Lagoon Timur, Bandar Sunway, 46150 PETALING JAYA, SELANGOR

MALAYSIA

Telephone : +60 (603)03-563-53321Fax : +60 (603)03-563-54116

1.5 Emergency telephone

Emergency Phone # : 1-800-815-308 (CHEMTREC) \* + 62 0800

140 1253 (Customer Call Centre)

## Section 2: Hazard identification

## 2.1 GHS Classification

Classification according to CLASS regulations 2013

Not a hazardous substance or mixture.

## 2.2 GHS Label elements, including precautionary statements

Labelling according to CLASS regulations 2013

Pictogram none
Signal word none
Hazard statement(s) none
Precautionary none

statement(s)

Not a hazardous substance or mixture.

2.3 Other hazards - none



## SECTION 3: Composition and information of the ingredients of the hazardous chemical

Substance / Mixture : Substance

3.1 Substances

Formula : SO4.2Na

Molecular weight : 142.04 g/mol

CAS-No. : 7757-82-6

EC-No. : 231-820-9

No components need to be disclosed according to the applicable regulations.

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

## 4.1 Description of first-aid measures

#### If inhaled

After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with

water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

## 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 extinguishing measures that are appropriate to local circumstances and the surrounding environment.

## Unsuitable extinguishing media

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

## 5.2 Special hazards arising from the substance or mixture

Sulfur oxides

Sodium oxides

Not combustible.

Ambient fire may liberate hazardous vapours.

## **5.3** Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.

#### 5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.



#### **SECTION 6: Accidental release measures**

## 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. 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 dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

#### 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. Dry.

## Storage stability

Recommended storage temperature 2 - 30 °C

2 - 30 C

## Storage class

Storage class (TRGS 510): 13: Non Combustible Solids

## 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 and personal protection**

## 8.1 Control parameters

## **Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

## 8.2 Exposure controls

# **Appropriate engineering controls**

Change contaminated clothing. Wash hands after working with substance.

## **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). Safety glasses



## Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested: KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell,

Internet: www.kcl.de).

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested: KCL 741 Dermatril® L

# Respiratory protection

required when dusts 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.

#### Control of environmental exposure

Do not let product enter drains.

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

## Information on basic physical and chemical properties

Form: crystalline a) Appearance

Color: white

b) Odor odorless

c) Odor Threshold Not applicable

5.2 - 8.0 at 50 g/l at 20 °C d) pH

Melting point: 888 °C e) Melting

point/freezing point

Initial boiling point 108.9 °C

and boiling range

Not applicable

g) Flash point h) Evaporation rate No data available

The product is not flammable. Flammability (solid, gas)



j) Upper/lower No data available flammability or explosive limits

k) Vapor pressure Not applicablel) Vapor density No data availablem) Density 2.70 g/cm3 at 20 °C

Relative density No data available

n) Water solubility 445.5 g/l at 20 °C - OECD Test Guideline 105- completely

soluble

o) Partition coefficient: Not applicable for inorganic substances

n-octanol/water

p) Autoignition > 400 °C

temperature - Relative self-ignition temperature for solidsdoes not ignite

q) Decomposition > 890 °C -

temperature

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

s) Explosive properties No data available

t) Oxidizing properties none

# 9.2 Other safety information

Surface tension 71 mN/m at 1g/l at 20 °C

- OECD Test Guideline 115

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

## 10.3 Possibility of hazardous reactions

Risk of explosion with:

smelt with

Aluminum

## 10.4 Conditions to avoid

no information available

# 10.5 Incompatible materials

Strong oxidizing agents

# 10.6 Hazardous decomposition products

In the event of fire: see section 5



## **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

# **Acute toxicity**

LD50 Oral - Rat - female - > 2,000 mg/kg

(OECD Test Guideline 423)

Symptoms: Possible damages:, Nausea, Vomiting

LC50 Inhalation - Rat - male and female - 4 h - > 2.4 mg/l - dust/mist

(OECD Test Guideline 436)

Remarks: (highest concentration to be prepared)

Dermal: No data available

Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation - 4 h (OECD Test Guideline 404)

## Serious eye damage/eye irritation

Eyes - Rabbit

Result: slight irritation - 24 h

(Regulation (EC) No. 440/2008, Annex, B.5)

# Respiratory or skin sensitization

Maximization Test - Guinea pig

Result: negative

(OECD Test Guideline 406)

# Germ cell mutagenicity

Test Type: Ames test

Test system: Salmonella typhimurium

Metabolic activation: with and without metabolic activation

Result: negative Remarks: (ECHA)

Test Type: In vitro mammalian cell gene mutation test

Test system: mouse lymphoma cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 476

Result: negative

Test Type: Chromosome aberration test in vitro

Test system: Chinese hamster lung cells

Metabolic activation: with and without metabolic activation

Method: OECD Test Guideline 473

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



#### 11.2 Additional Information

Nausea, Vomiting, cardiovascular disorders

Systemic effects:

After uptake of large quantities:

cardiovascular disorders

Symptoms in:

Gastrointestinal tract

However, when the product is handled appropriately, hazardous effects are unlikely to occur.

Handle in accordance with good industrial hygiene and safety practice.

# **SECTION 12: Ecological information**

## 12.1 Toxicity

Toxicity to fish static test LC50 - Pimephales promelas (fathead minnow) - 7,960

> mg/l - 96 h(US-EPA)

Toxicity to daphnia

and other aquatic invertebrates

static test EC50 - Daphnia magna (Water flea) - 1,766 mg/l - 48 h

(US-EPA)

Toxicity to algae

static test EC50 - Nitzschia sp. - 1,900 mg/l - 120 h

Remarks: (ECHA)

Toxicity to bacteria

NOEC - activated sludge - ca. 8 mg/l - 37 Days

Remarks: (ECHA)

## 12.2 Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

## 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 not available as chemical safety assessment not required/not conducted

# 12.6 Endocrine disrupting properties

No data available

## 12.7 Other adverse effects

Discharge into the environment must be avoided.



## **SECTION 13: Disposal information**

## 13.1 Waste treatment methods

#### **Product**

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself. See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions. According to Quality Environment Regulation (Scheduled Waste) 2005, waste need to be sent to designated premise for recycle, treatment or disposal. Please contact Kualiti Alam for waste classification and correct disposal method.

**SECTION 14: Transportation information** 

14.1 UN number

ADR/RID: - IMDG: - IATA-DGR: -

14.2 UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA-DGR: Not dangerous goods

14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA-DGR: -

14.4 Packaging group

ADR/RID: - IMDG: - IATA-DGR: -

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA-DGR: no

14.6 Special precautions for user

## 14.7 Incompatible materials

Strong oxidizing agents

## **Further information**

Not classified as dangerous in the meaning of transport regulations.

## **SECTION 15: Regulatory information**

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

## **Notification status**

All components of this product are on the Canadian DSL

ENCS:

On the inventory, or in compliance with the inventory

ISHL:

On the inventory, or in compliance with the inventory

KECI:

On the inventory, or in compliance with the inventory

NZIOC:

On the inventory, or in compliance with the inventory

PICCS:

On the inventory, or in compliance with the inventory



#### **SECTION 16: Other information**

#### **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 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.

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