# SIGMA-ALDRICH

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 Version 5.2 Revision Date 25.03.2014 Print Date 24.12.2016 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	:	Ammonium thiosulfate	
	Product Number Brand REACH No. CAS-No.	:	<ul> <li>336726</li> <li>Aldrich</li> <li>A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.</li> <li>7783-18-8</li> </ul>	
1.2	2 Relevant identified uses of the substance or mixture and uses advised against			
	Identified uses	:	Laboratory chemicals, Manufacture of substances	
1.3	3 Details of the supplier of the safety data sheet			
	Company	:	Sigma-Aldrich Chemie GmbH Riedstrasse 2 D-89555 STEINHEIM	
	Telephone Fax E-mail address	:	+49 89-6513-1444 +49 7329-97-2319 eurtechserv@sial.com	
1.4 Emergency telephone number			r	
	Emergency Phone #	:	0800 181 7059 (CHEMTREC Deutschland) +49 (0)696 43508409 (CHEMTREC weltweit)	

# **SECTION 2: Hazards identification**

# 2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. This substance is not classified as dangerous according to Directive 67/548/EEC.

# 2.2 Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

#### 2.3 Other hazards - none

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

3.1	Substances		
	Formula	:	H <sub>8</sub> N <sub>2</sub> O <sub>3</sub> S <sub>2</sub>
	Molecular Weight	:	148,21 g/mol
	CAS-No.	:	7783-18-8
	EC-No.	:	231-982-0

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

# **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

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

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 nitrogen oxides (NOx), Sulphur oxides

# **5.3** Advice for firefighters Wear self contained breathing apparatus for fire fighting 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. Avoid breathing dust.

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 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. Provide appropriate exhaust ventilation at places where dust is formed. 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.

# 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

#### 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

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 EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 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 CE 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**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### 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

information on basic physical and chemical properties							
a)	Appearance	Form: Crystals with lumps Colour: white					
b)	Odour	no data available					
c)	Odour Threshold	no data available					
d)	рН	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)	Evapouration 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					
I)	Vapour density	no data available					
m)	Relative density	1,679 g/cm3 at 25 °C					
n)	Water solubility	1.033 g/l at 100 °C - soluble					
o)	Partition coefficient: n- octanol/water	no data available					
p)	Auto-ignition temperature	no data available					
q)	Decomposition temperature	150 °C -					
r)	Viscosity	no data available					
s)	Explosive properties	no data available					
t)	Oxidizing properties	no data available					
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 Strong oxidizing agents, Strong acids, Magnesium, Aluminum

9.2

### 10.6 Hazardous decomposition products

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

LD50 Oral - rat - 2.890 mg/kg Remarks: Lungs, Thorax, or Respiration:Emphysema. Kidney, Ureter, Bladder:Changes in tubules (including acute renal failure, acute tubular necrosis). Blood: Hemorrhage.

# Skin corrosion/irritation

Skin - rabbit Result: No skin irritation

#### Serious eye damage/eye irritation

Eyes - rabbit Result: No eye irritation (OECD Test Guideline 405)

# Respiratory or skin sensitisation

in vivo assay - mouse Result: Does not cause skin sensitisation. (OECD Test Guideline 429)

# Germ cell mutagenicity

mouse lymphocyte Result: negative

#### 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: XN6465000

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

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

#### 12.1 Toxicity

Toxicity to fish	static test LC50 - Lepomis macrochirus (Bluegill) - 510 mg/l - 96 h
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 230 mg/l - 48 h
Toxicity to algae	static test EC50 - Pseudokirchneriella subcapitata - > 100 mg/l - 72 h (OECD Test Guideline 201)

Toxicity to bacteria

- **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 not available as chemical safety assessment not required/not conducted

#### 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. 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					
14.1	<b>UN number</b> ADR/RID: -	IMDG: -	IATA: -		
14.2	UN proper shipping nameADR/RID:Not dangerous goodsIMDG:Not dangerous goodsIATA:Not dangerous goods	;			
14.3	Transport hazard class(es) ADR/RID: -	IMDG: -	IATA: -		
14.4	Packaging group ADR/RID: -	IMDG: -	IATA: -		
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**

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

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

no data available

# 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

# **SECTION 16: Other information**

# **Further information**

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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.sigmaaldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.