# SIGMA-ALDRICH

# **SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006 Version 5.2 Revision Date 24.09.2013 Print Date 05.03.2014 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	:	2-Acrylamido-2-methyl-1-propanesulfonic acid
	Product Number Brand REACH No. CAS-No.	:	<ul> <li>282731</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>15214-89-8</li> </ul>
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 Pte Ltd 1 Science Park Road #02-14 The Capricorn Singapore Science Park Road II SINGAPORE 117528 SINGAPORE
	Telephone Fax	:	+65 6779 1200 +65 6779 1822
1.4	Emergency telephone num	nbe	r
	Emergency Phone #	:	1-800-262-8200

## **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 Acute toxicity, Oral (Category 4), H302 Acute toxicity, Inhalation (Category 4), H332 Serious eye damage (Category 1), H318 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

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

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Xn Harmful R20/22, R37, R41

For the full text of the R-phrases 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) H302 + H332

Harmful if swallowed or if inhaled

H318	Causes serious eye damage.
H335	May cause respiratory irritation.
Precautionary statement(s)	Avoid breathing dust.
P261	Wear protective gloves/ eye protection/ face protection.
P280	IF IN EYES: Rinse cautiously with water for several minutes. Remove
P305 + P351 + P338	contact lenses, if present and easy to do. Continue rinsing.
Supplemental Hazard Statements	none

## 2.3 Other hazards - none

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

#### 3.1 Substances

Chemical characterization	:	Natural product
Formula	:	C <sub>7</sub> H <sub>13</sub> NO <sub>4</sub> S
Molecular Weight	:	207,25 g/mol
CAS-No.	:	15214-89-8
EC-No.	:	239-268-0

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

Component		Classification	Concentration
2-Acrylamido-2-metl	hylpropanesulphonic acid	k	
CAS-No.	15214-89-8	Acute Tox. 4; Eye Dam. 1;	<= 100 %
EC-No.	239-268-0	STOT SE 3; H302 + H332,	
		H318, H335	

#### Hazardous ingredients according to Directive 1999/45/EC

Component		Classification	Concentration
2-Acrylamido-2-methylpropanesulphonic acid			
CAS-No. EC-No.	15214-89-8 239-268-0	Xn, R20/22 - R37 - R41	<= 100 %

For the full text of the H-Statements and R-Phrases 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

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

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 Carbon oxides, 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. Ensure adequate ventilation. Evacuate personnel to safe areas. 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 contact with skin and eyes. 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.

hygroscopic Heat sensitive. Handle under inert gas. Protect from moisture.

#### 7.3 Specific end use(s)

A part 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

Face shield and safety glasses 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**

Complete suit protecting against chemicals, 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 full-face particle respirator type N100 (US) or type P3 (EN 143) 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

Do not let product enter drains.

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

# 9.1 Information on basic physical and chemical properties

a)	Appearance	Form: powder Colour: white
b)	Odour	no data available
c)	Odour Threshold	no data available
d)	рН	no data available
e)	Melting point/freezing point	Melting point/range: 195 °C - dec.
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	no data available	
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	
	Other safety information no data available		

# **SECTION 10: Stability and reactivity**

10.1 Reactivity no data available

9.2

- **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 bases
- **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 - 1.830 mg/kg (OECD Test Guideline 401)

# Skin corrosion/irritation

Skin - rabbit Result: No skin irritation

# Serious eye damage/eye irritation

Eyes - rabbit Result: Risk of serious damage to eyes.

#### Respiratory or skin sensitisation

Buehler Test - guinea pig Does not cause skin sensitisation.

#### Germ cell mutagenicity

Mutation in mammalian somatic cells. Other cell types Result: negative Chromosome aberration test in vitro Other cell types Result: Equivocal evidence.

#### 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** Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure no data available

# Aspiration hazard

no data available

# Additional Information

RTECS: TZ6658000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

# **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 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.

IATA: -

#### **Contaminated packaging**

Dispose of as unused product.

# **SECTION 14: Transport information**

14.1 UN number

ADR/RID: -

IMDG: -

# 14.2 UN proper shipping name

ADR/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**

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

Acute Tox.	Acute toxicity
Eye Dam.	Serious eye damage
H302	Harmful if swallowed.
H302 + H332	Harmful if swallowed or if inhaled
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.

# Full text of R-phrases referred to under sections 2 and 3

Xn	Harmful
R20/22	Harmful by inhalation and if swallowed.
R37	Irritating to respiratory system.
R41	Risk of serious damage to eyes.

# **Further information**

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