# **SAFETY DATA SHEET**

according to Regulation (EC) No. 1907/2006 Version 5.0 Revision Date 08.08.2012 Print Date 25.04.2013

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

## 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers

Product name : Sulfamic acid

Product Number : 86040 Brand : Fluka

Index-No. : 016-026-00-0 CAS-No. : 5329-14-6

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 Chemie GmbH

Industriestrasse 25 CH-9471 BUCHS

Telephone : +41 81-755-2511
Fax : +41 81-756-5449
E-mail address : eurtechserv@sial.com

1.4 Emergency telephone number

Emergency Phone # : +41 81-755-2255

145(CH)

+41 44-251-5151 (Tox-Zentrum)

## 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

## Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Eye irritation (Category 2) Skin irritation (Category 2)

Chronic aquatic toxicity (Category 3)

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

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Irritating to eyes and skin.

## 2.2 Label elements

## Labelling according Regulation (EC) No 1272/2008 [CLP]

Pictogram

Signal word Warning

Hazard statement(s)

H315 Causes skin irritation.
H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P273 Avoid release to the environment.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard

Statements

none

## According to European Directive 67/548/EEC as amended.

Hazard symbol(s)

×

R-phrase(s)

R36/38 Irritating to eyes and skin.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in

the aquatic environment.

S-phrase(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and

seek medical advice.

S28 After contact with skin, wash immediately with plenty of soap and water.
S61 Avoid release to the environment. Refer to special instructions/ Safety

data sheets.

## 2.3 Other hazards - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

## 3.1 Substances

Synonyms : Amidosulfonic acid

Formula : H<sub>3</sub>NO<sub>3</sub>S Molecular Weight : 97,09 g/mol

Component		Concentration
Sulphamidic acid		
CAS-No.	5329-14-6	-
EC-No.	226-218-8	
Index-No.	016-026-00-0	

## 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

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Symptoms and signs of poisoning are:, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Inhalation may provoke the following symptoms:, spasm, inflammation and edema of the bronchi, spasm, inflammation and edema of the larynx, Aspiration or inhalation may cause chemical pneumonitis.

## 4.3 Indication of any immediate medical attention and special treatment needed

no data available

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## 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

## 6. ACCIDENTAL RELEASE MEASURES

## 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

## 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 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.

## 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.

#### 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 uses

no data available

## 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

#### Eve/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.

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The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Immersion protection Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: > 480 min

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

Splash protection Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: > 30 min

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

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 873000, 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 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).

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

a) Appearance Form: solid

Colour: white

Odour no data available Odour Threshold no data available c) pΗ no data available d)

Melting point/freezing

point

Melting point/range: 215 - 225 °C - dec.

Initial boiling point and

boiling range

no data available

Flash point

no data available

h) Evaporation rate no data available Flammability (solid, gas) no data available i)

Upper/lower flammability or explosive limits no data available

Vapour pressure no data available I) Vapour density no data available

2,151 g/cm3 at 25 °C m) Relative density

n) Water solubility no data available Partition coefficient: nno data available

octanol/water

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p) Autoignition no data available

temperature

q) Decomposition no data available

temperature

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

#### 10. STABILITY AND REACTIVITY

## 10.1 Reactivity

no data available

## 10.2 Chemical stability

no data available

## 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

## 11. TOXICOLOGICAL INFORMATION

## 11.1 Information on toxicological effects

## **Acute toxicity**

LD50 Oral - rat - 3.160 mg/kg

LD50 Oral - mouse - 1.312 mg/kg

Remarks: Behavioral:Excitement. Behavioral:Altered sleep time (including change in righting reflex).

LD50 Oral - guinea pig - 1.050 mg/kg

Remarks: Behavioral:Excitement. Behavioral:Altered sleep time (including change in righting reflex).

## Skin corrosion/irritation

Skin - rabbit - Skin irritation

Remarks: Moderate skin irritation

Skin - Human - Mild skin irritation

Skin - rabbit - Severe skin irritation - 24 h

## Serious eye damage/eye irritation

Eyes - rabbit - Moderate eye irritation

Eyes - rabbit - Severe eye irritation - 24 h

## Respiratory or skin sensitization

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.

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## 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

## Potential health effects

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes** Causes eye burns.

## Signs and Symptoms of Exposure

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Symptoms and signs of poisoning are:, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Inhalation may provoke the following symptoms:, spasm, inflammation and edema of the bronchi, spasm, inflammation and edema of the larynx, Aspiration or inhalation may cause chemical pneumonitis.

## **Additional Information**

RTECS: Not available

#### 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

no data available

### 12.6 Other adverse effects

Harmful to aquatic life.

## 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.

# 14. TRANSPORT INFORMATION

#### 14.1 UN number

ADR/RID: 2967 IMDG: 2967 IATA: 2967

## 14.2 UN proper shipping name

ADR/RID: SULPHAMIC ACID IMDG: SULPHAMIC ACID Sulphamic acid

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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

## 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

no data available

## 16. OTHER INFORMATION

## **Further information**

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