

# SAFETY DATA SHEET

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Trade name**

AMI Silitrace Reagent 4b

**Product no.**

A-85.420.860

**REACH registration number**

Not applicable

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Relevant identified uses of the substance or mixture**

Reagent for water analysis

**Uses advised against**

-

The full text of any mentioned and identified use categories are given in section 16

### 1.3. Details of the supplier of the safety data sheet

**Company and address**

SWAN Analytische Instrumente AG

Studbachstrasse 13

CH-8340 Hinwil

Phone: +41 44 943 63 00

Fax: +41 44 943 63 01

**Contact person**

Research and Development

**E-mail**

info@swan.ch

**SDS date**

2016-06-27

**SDS Version**

2.0

### 1.4. Emergency telephone number

Swiss Toxicological Information Centre

CH-8032 Zürich / Switzerland

Tel.: +41 44 251 51 51 (international)

Use your national or local emergency number

See section 4 "First aid measures"

## SECTION 2: Hazards identification

### ▼ 2.1. Classification of the substance or mixture

Skin Corr. 1A; H314

Eye Dam. 1; H318

See full text of H-phrases in section 2.2.


### 2.2. Label elements

**Hazard pictogram(s)****▼ Signal word**

Danger

**▼ Hazard statement(s)**

Causes severe skin burns and eye damage. (H314)

 <b>Safety statement(s)</b>	General	-
	Prevention	Do not breathe mist/vapours/fume/spray. (P260). Wear eye protection/protective clothing/protective gloves. (P280).
	Response	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. (P303+P361+P353). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338).
	Storage	-
	Disposal	-

### ▼ Identity of the substances primarily responsible for the major health hazards

Sulphuric acid, Alcohol C13-iso, ethoxylated 15 EO (AFO-3)

### ▼ 2.3. Other hazards

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## Additional labelling

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## Additional warnings

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**VOC**

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### SECTION 3: Composition/information on ingredients

### ▼ 3.1/3.2. Substances/Mixtures

NAME:	Water
IDENTIFICATION NOS.:	CAS-no: 7732-18-5 EC-no: 231-791-2
CONTENT:	60-80%
CLP CLASSIFICATION:	NA
NAME:	Sulphuric acid
IDENTIFICATION NOS.:	CAS-no: 7664-93-9 EC-no: 231-639-5 Index-no: 016-020-00-8
CONTENT:	15-25%
CLP CLASSIFICATION:	Skin Corr. 1A H314
NAME:	Alcohol C13-iso, ethoxylated 15 EO (AFO-3)
IDENTIFICATION NOS.:	CAS-no: 9043-30-5 EC-no: 500-027-2
CONTENT:	3-5%
CLP CLASSIFICATION:	Acute Tox. 4, Eye Dam. 1 H302, H318

(\*) See full text of H-phrases in chapter 16. Occupational exposure limits are listed in section 8, if these are available.

### Other informations

ATEmix(oral) > 2000  
Eye Cat. 1 Sum = Sum(Ci/S(G)CLi) = 2.2936 - 3.4404  
Skin Corr. 1A Sum = Sum(Ci/S(G)CLi) = 1.22666666666666666666666666666666 - 1.84

## SECTION 4: First aid measures

#### 4.1. Description of first aid measures

## ▼ General information

**In the case of accident:** Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor, if in doubt about the injured person's condition or if the symptoms continue. Never give an unconscious person water or similar.

## Inhalation

Get the injured person into fresh air. Make sure there is always someone with the injured person. Prevent shock by keeping the injured person warm and calm. If the person stops breathing, give mouth-to-mouth resuscitation. If unconscious, roll the injured person onto side with the top leg bent at both knee and hip. Call an ambulance.

## Skin contact

Remove contaminated clothing and shoes at once. Skin that has come in contact with the material must be washed thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

#### ▼ Eye contact

Remove contact lenses. Flush eyes with plenty of water (20-30°C) for at least 15 minutes and continue until irritation stops. Make sure you flush under the upper and lower eyelids. Contact a doctor at once.

#### Ingestion

Give the person plenty to drink and stay with the person. If the person feels unwell, contact a doctor immediately and take this safety data sheet or the label from the product with you. Do not induce vomiting unless recommended by the doctor. Hold head facing down so that no vomit runs back into the mouth and throat.

#### Burns

Not applicable

#### ▼ 4.2. Most important symptoms and effects, both acute and delayed

Tissue damaging effects: This product contains substances which are corrosive. If vapour or aerosols are inhaled, it can result in damage to lungs, irritation and burns in the respiratory organs as well as coughing. Corrosive substances cause irreversible damage to eyes and acid burns to skin.

Irritation effects: This product contains substances which cause irritation to skin and eyes, or when inhaled. Contact with locally irritative substances can cause the area of contact to be more prone to absorb damaging substances such as allergens.

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

No special

#### Information to medics

Bring this safety data sheet.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Water jets should not be used, since they can spread the fire.

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

If the product is exposed to high temperatures, as in the case of fire, dangerous catabolic substances are produced. These are: Sulphur oxides. Carbon oxides. Fire will result in thick black smoke. Exposure to catabolic products can damage your health. Fire fighters should use proper protection gear. Closed containers, which are exposed to fire, should be cooled with water. Do not let fire-extinguishing water run into sewers and other water courses.

#### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

Avoid direct contact with spilled substances. Avoid inhalation of vapours from waste material.

#### 6.2. Environmental precautions

No specific requirements.

#### 6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. Cleaning should be done as far as possible using normal cleaning agents. Solvents should be avoided.

#### 6.4. Reference to other sections

See section on "Disposal considerations" with regard to the handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Smoking, consumption of food or liquid, and storage of tobacco, food or liquids are not allowed in the workrooms. See section on 'Exposure controls/personal protection' for information on personal protection. Avoid direct contact with the product.

#### 7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

#### ▼ Storage temperature

No data available.

#### 7.3. Specific end use(s)

This product should only be used for applications described in Section 1.2

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### ▼ OEL

Sulphuric acid (EH40/2005)

Long-term exposure limit (8-hour TWA reference period): - ppm | 0,05 mg/m<sup>3</sup>

Short-term exposure limit (15-minute reference period): - ppm | - mg/m<sup>3</sup>

#### ▼ DNEL / PNEC

No data available

### 8.2. Exposure controls

Compliance with the stated exposure limits values should be checked on a regular basis.

#### General recommendations

▼ Observe general occupational hygiene.

#### Exposure scenarios

If there is an appendix to this safety data sheet, the indicated exposure scenarios must be complied.

#### Exposure limits

Trade users are covered by the rules of the working environment legislation on maximum concentrations for exposure. See work hygiene threshold values below.

#### Appropriate technical measures

Airborne gas and dust concentrations must be kept as low as possible and below the current threshold values (see below). Use for example an exhaust system if the normal air flow in the work room is not sufficient. Make sure that eyewash and emergency showers are clearly marked.

#### Hygiene measures

Whenever you take a break in using this product and when you have finished using it, all exposed areas of the body must be washed. Always wash hands, forearms and face.

#### Measures to avoid environmental exposure

Keep damming materials near the workplace. If possible collect spillage during work.

#### Individual protection measures, such as personal protective equipment



#### ▼ Generally

Use only CE marked protective equipment.

#### ▼ Respiratory Equipment

NA

#### Skin protection

Special work clothing should be used. When working with this product for a long period of time, use a protective suit.

#### ▼ Hand protection

Recommended: Nitrile rubber. : NA

#### ▼ Eye protection

## SECTION 9: Physical and chemical properties

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

Form	Liquid
Colour	Colourless
Odour	Characteristic
pH	1
Viscosity	No data available.
Density (g/cm <sup>3</sup> )	1.18

#### ▼ Phase changes

Melting point (°C)	No data available.
Boiling point (°C)	No data available.
Vapour pressure	No data available.

▼ **Data on fire and explosion hazards**

Flashpoint (°C)	No data available.
Ignition (°C)	No data available.
Self ignition (°C)	No data available.
Explosion limits (Vol %)	No data available.

▼ **Solubility**

Solubility in water	Soluble
n-octanol/water coefficient	No data available.

▼ **9.2. Other information**

Solubility in fat (g/L)	No data available.
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## SECTION 10: Stability and reactivity

**10.1. Reactivity**

No data available

**10.2. Chemical stability**

The product is stable under the conditions, noted in the section on "Handling and storage".

**10.3. Possibility of hazardous reactions**

No special

**10.4. Conditions to avoid**

Do not expose to heat (e.g. sunlight), because it can lead to excess pressure.

**10.5. Incompatible materials**

Strong acids, strong bases, strong oxidizing agents, and strong reductants agents.

**10.6. Hazardous decomposition products**

The product is not degraded when used as specified in section 1.

## SECTION 11: Toxicological information

**11.1. Information on toxicological effects**

▼ **Acute toxicity**

Substance	Species	Test	Route of exposure	Result
Alcohol C13-iso, ethoxylated 1...	Rat	LD50	Oral	2000 mg/kg
Sulphuric acid	Rat	LD50	Oral	2140 mg/kg
Sulphuric acid	Rat	LC50	Inhalation	510 mg/m <sup>3</sup>

▼ **Skin corrosion/irritation**

Causes severe skin burns and eye damage.

**Serious eye damage/irritation**

Causes serious eye damage.

**Respiratory or skin sensitisation**

Data on substance: Sulphuric acid

**Germ cell mutagenicity**

No data available.

**Carcinogenicity**

No data available.

**Reproductive toxicity**

No data available.

**STOT-single exposure**

No data available.

**STOT-repeated exposure**

No data available.

**Aspiration hazard**

No data available.

▼ **Long term effects**

Tissue damaging effects: This product contains substances which are corrosive. If vapour or aerosols are inhaled, it can result in damage to lungs, irritation and burns in the respiratory organs as well as coughing.

Corrosive substances cause irreversible damage to eyes and acid burns to skin.

Irritation effects: This product contains substances which cause irritation to skin and eyes, or when inhaled.

Contact with locally irritative substances can cause the area of contact to be more prone to absorb damaging substances such as allergens.

## SECTION 12: Ecological information

### ▼12.1. Toxicity

Substance	Species	Test	Duration	Result
Alcohol C13-iso, ethoxylated 1...	Fish	LC50	96h	>1-10mg/l
Sulphuric acid	Daphnia	EC50	24 h	29 mg/l

### 12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
No data available.			

### 12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BCF
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

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

The product is covered by the regulations on dangerous waste.

#### ▼Waste

EWC code

16 05 06\*

#### ▼Specific labelling

laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals

#### Contaminated packing

Packaging which contains leftovers from the product must be disposed of in the same way as the product.

## SECTION 14: Transport information

### 14.1 – 14.4

This product is covered by the conventions on dangerous goods.

#### ▼ADR/RID

14.1. UN number	2796
14.2. UN proper shipping name	SULPHURIC ACID
14.3. Transport hazard class(es)	8
14.4. Packing group	II
Notes	-
Tunnel restriction code	-

#### ▼IMDG

UN-no.	2796
Proper Shipping Name	SULPHURIC ACID
Class	8
PG*	II
EmS	-
MP**	No
Hazardous constituent	-

#### IATA/ICAO

UN-no.	2796
Proper Shipping Name	SULPHURIC ACID
Class	8
PG*	II

### 14.5. Environmental hazards

-

### 14.6. Special precautions for user

-

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

No data available

(\*) Packing group

(\*\*) Marine pollutant

## SECTION 15: Regulatory information

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

#### ▼ Restrictions for application

Only for professional users

#### Demands for specific education

-

#### Additional information

-

#### Sources

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (CLP). EC regulation 1907/2006 (REACH).

### 15.2. Chemical safety assessment

No

## SECTION 16: Other information

#### ▼ Full text of H-phrases as mentioned in section 3

H302 - Harmful if swallowed.

H314 - Causes severe skin burns and eye damage.

H318 - Causes serious eye damage.

#### The full text of identified uses as mentioned in section 1

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#### Other symbols mentioned in section 2

-

#### Other

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

A change (in proportion to the last essential change (first cipher in SDS version)) is marked with a blue triangle.

#### The safety data sheet is validated by

Admin

#### Date of last essential change (First cipher in SDS version)

2015-05-05

#### Date of last minor change (Last cipher in SDS version)

2015-05-05