

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name

Calibration solution pH9

Product no.

A-85.114.300, A-85.114.500, A-85.114.700

REACH registration number

Not applicable

Unique formula identifier (UFI)

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

Relevant identified uses of the substance or mixture

Calibration solution

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
Switzerland
Phone: +41 44 943 63 00
Fax: +41 44 943 63 01

Contact person

M.Lendi

E-mail

info@swan.ch

SDS date

2019-03-08

SDS Version

8.0

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 "First aid measures".

SECTION 2: Hazards identification

▼ 2.1. Classification of the substance or mixture

Repr. 1A; H360

See full text of H-phrases in section 2.2.

2.2. Label elements

Hazard pictogram(s)



According to EC-Regulation 2015/830

Signal word

Danger

Hazard statement(s)

May damage fertility or the unborn child. (H360)

Precautionary statements

General -

Prevention

Obtain special instructions before use. (P201).

Wear protective clothing/protective gloves/eye protection/face protection. (P280).

Response

IF exposed or concerned: Get medical advice/attention. (P308+P313).

Storage -

Disposal

Dispose of contents/container to an approved waste disposal plant. (P501).

Identity of the substances primarily responsible for the major health hazards

Sodium tetraborate decahydrate

2.3. Other hazards

The product contains one or several substance(s) included in ECHA's list of Substances of Very High Concern (SVHC)

Additional labelling

Not applicable

Additional warnings

Not applicable

VOC (volatile organic compound)

Not applicable

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: 95-100%
CLP CLASSIFICATION: NA

NAME: Sodium tetraborate decahydrate
IDENTIFICATION NOS.: CAS-no: 1303-96-4 Index-no: 005-011-01-1
CONTENT: 1 - <2.5%
CLP CLASSIFICATION: Repr. 1A
H360
NOTE: SVHC

(*) See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.
SVHC = A substance that is included in the Candidate List of substances of very high concern (SVHCs).

Other information

ATEmix(oral) > 2000

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.
The doctor can contact The National Poisons Information Service: Dial 0344 892 0111 (24 h service).

Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

Inhalation

Bring the person into fresh air and stay with him/her.

Skin contact

Immediately remove contaminated clothing and shoes. Ensure that skin, which has been exposed to the material, is washed thoroughly with soap and water. Skin cleanser can be used. DO NOT use solvents or

According to EC-Regulation 2015/830

thinners.

Eye contact

Remove contact lenses and open eyes widely. Flush eyes with water or saline water(20-30°C) for at least 15 minutes. Seek medical assistance and continue flushing during transport.

Ingestion

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the victim lean forward with head down to avoid inhalation of- or choking on vomited material.

Burns

Not applicable

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

Nothing special

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

IF exposed or concerned: Get immediate medical advice/attention.

Information to medic

Bring this safety data sheet.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Waterjets 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, e.g. in the event of fire, dangerous catabolic substances are produced. These are: Some metal oxides. Fire will result in dense black smoke. Exposure to combustion products may harm your health. Fire fighters should wear appropriate protection equipment. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

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 spilled material.

6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities. It is recommended to install waste collection trays to prevent emissions to the waste water system and surrounding environment.

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. To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

6.4. Reference to other sections

See section on "Disposal considerations" in regard of 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, storage of tobacco, consumption and storage of 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

According to EC-Regulation 2015/830

Store locked up. The room and chemical closet shall be provided with warning sign for toxic substances. Always store in containers of the same material as the original container. 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 quoted in section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

OEL

No substances are listed in The Control of Substances Hazardous to Health Regulations with an occupational exposure limit.

DNEL / PNEC

No data available

8.2. Exposure controls

Control is unnecessary if the product is used as intended.

General recommendations

Observe general occupational hygiene standards.

Exposure scenarios

In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.

Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of gas or dust.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure

Keep containment 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

Dedicated work clothing should be worn. Wear a protective suit in the event of prolonged periods of work with the product.

Hand protection

Nitrile rubber

Eye protection

No specific requirements.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Liquid
Colour	Blue
Odour	None

According to EC-Regulation 2015/830

Odour threshold (ppm)	No data available.
pH	9
Viscosity (40°C)	No data available.
Density (g/cm ³)	No data available.
Phase changes	
Melting point (°C)	No data available.
Boiling point (°C)	No data available.
Vapour pressure	No data available.
Decomposition temperature (°C)	No data available.
Evaporation rate (n-butylacetate = 100)	No data available.
Data on fire and explosion hazards	
Flash point (°C)	No data available.
Ignition (°C)	No data available.
Auto flammability (°C)	No data available.
Explosion limits (% v/v)	No data available.
Explosive properties	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.

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 "Handling and storage".

10.3. Possibility of hazardous reactions

Nothing special

▼ 10.4. Conditions to avoid

Nothing special

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing 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: Sodium tetraborate decahydrate
 Species: Rabbit
 Test: LD50
 Route of exposure: Dermal
 Result: 10'000 mg/kg

Substance: Sodium tetraborate decahydrate
 Species: Rat
 Test: LD50
 Route of exposure: Oral
 Result: 4'500-5'000 mg/kg

Skin corrosion/irritation

No data available.

Serious eye damage/irritation

No data available.

Respiratory or skin sensitisation

No data available.

According to EC-Regulation 2015/830

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

May damage fertility or the unborn child.

Data on substance: Sodium tetraborate decahydrate

STOT-single exposure

No data available.

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

Long term effects

Reproductive toxicity: This product contains teratogenic substances, which may produce anomalies and/or developmental defects to the human offspring. Adverse effects include: death, growth retardation, congenital disorders, delayed mental development, and functional disorders.

Reproductive toxicity: This product contains reprotoxic substances, which may harm the reproductive capacity. Adverse effects include: sterility, effects on the sexual function, lowered effective fertility and dysfunctional menstrual cycle.

SECTION 12: Ecological information

12.1. Toxicity

Substance: Sodium tetraborate decahydrate
 Species: Fish
 Test: LC50
 Duration: 72 h
 Result: 178 mg/l

Substance: Sodium tetraborate decahydrate
 Species: Daphnia
 Test: EC50
 Duration: 48 h
 Result: 1.085 - 1.402 mg/l

Substance: Sodium tetraborate decahydrate
 Species: Algae
 Test: IC50
 Duration: 96 h
 Result: 158 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

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

12.6. Other adverse effects

Nothing special

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

According to EC-Regulation 2015/830

Waste

EWC code
16 05 06*

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

Specific labelling

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

Contaminated packing

Contaminated packaging must be disposed of similarly to the product.

SECTION 14: Transport information

14.1 – 14.4

Not dangerous goods according to ADR, IATA and IMDG.

ADR/RID

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

IMDG

- UN-no. -
- Proper Shipping Name -
- Class -
- PG* -
- EmS -
- MP** -
- Hazardous constituent -

IATA/ICAO

- UN-no. -
- Proper Shipping Name -
- Class -
- PG* -

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

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Additional information

Not applicable

According to EC-Regulation 2015/830

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Sources

Council Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding.

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

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).

Regulation (EC) 1907/2006 (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

Full text of H-phrases as mentioned in section 3

H360 - May damage fertility or the unborn child.

The full text of identified uses as mentioned in section 1

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Additional label elements

Not applicable

Other

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture is based on:

The classification of the mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

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, see section 1)) is marked with a blue triangle.

The safety data sheet is validated by

Admin

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

2018-06-25(7.0)

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

2018-06-25