

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 23.01.2023

Version number 5 (replaces version 4)

Revision: 19.01.2023

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

1.1 Product identifier

Trade name: **TISAB**

Article number: 140100

Description: TISAB total ionic strength buffer solution for fluoride electrode

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

Product category: PC21 Laboratory chemicals

Process category: PROC15 Use as laboratory reagent

Application of the substance / the preparation: Sample conditioning solution

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Xylem Analytics Germany GmbH

WTW

Am Achalaich 11

82362 Weilheim

Germany

Tel. +49 881 183-0

Further information obtainable from: E-mail: Info.WTW@xylem.com

1.4 Emergency telephone number: Chemtrec: (USA & Canada) 800-424-9300 (International) 001 703-527-3887

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008: The product is not classified, according to the CLP regulation.

2.2 Label elements:

Labelling according to Regulation (EC) No 1272/2008: Void

Hazard pictograms: Void

Signal word: Void

Hazard statements: Void

Additional information:

EUH210 Safety data sheet available on request.

2.3 Other hazards No further relevant information available.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description:

Mixture of substances listed below with nonhazardous additions.

Water, ammonium chloride

Dangerous components:

CAS: 12125-02-9	ammonium chloride	Acute Tox. 4, H302; Eye Irrit. 2, H319	1-5%
EINECS: 235-186-4			
Index number: 017-014-00-8			

Additional information: For the wording of the listed hazard phrases refer to section 16.

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SECTION 4: First aid measures

4.1 Description of first aid measures

- **After inhalation:** Supply fresh air.
- **After skin contact:**
Rinse skin with water [or shower].
Take off immediately all contaminated clothing and wash it before reuse.
If skin irritation or rash occurs: Get medical advice/attention.
- **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
Make victim drink water immediately (2 glasses at most).
Seek immediate medical advice.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- **Suitable extinguishing agents:** The product is not flammable. Extinguishing agent to suit environment.

5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Ammonia (NH₃)
Hydrogen chloride (HCl)
Nitrogen oxides (NO_x)

5.3 Advice for firefighters

- **Protective equipment:** Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

No special measurements required when handled properly.

6.2 Environmental precautions:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Wash off residuals with water.

6.4 Reference to other sections

See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling** No special precautions are necessary if used correctly.

- **Information about fire - and explosion protection:** No special measures required.

7.2 Conditions for safe storage, including any incompatibilities

- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Store tightly sealed at temperatures between 15 °C and 25 °C.

· **7.3 Specific end use(s)** No further relevant information available.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· **Additional information:** The lists valid during the making were used as basis.

8.2 Exposure controls

· **Appropriate engineering controls** No further data; see item 7.

Individual protection measures, such as personal protective equipment

General protective and hygienic measures:

Avoid contact with the eyes and skin.

Do not inhale gases / fumes / aerosols.

Take off contaminated clothing and wash it before reuse.

Wash hands before breaks and at the end of work.

· **Respiratory protection:** Not required.

· **Hand protection** Protective gloves

· **Material of gloves** Nitrile rubber, NBR

· **Eye/face protection** Safety glasses

Environmental exposure controls

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

· **Physical state**

Fluid

· **Colour:**

Colourless

· **Odour:**

Odourless

· **Melting point/freezing point:**

Undetermined.

· **Boiling point or initial boiling point and boiling range**

100 °C

· **Flammability**

Product is not flammable.

· **Flash point:**

Not applicable.

· **Viscosity:**

· **Kinematic viscosity**

Not determined.

· **Dynamic:**

Not determined.

· **Solubility**

· **water:**

Fully miscible.

· **Vapour pressure at 20 °C:**

23 hPa

· **Density and/or relative density**

· **Density:**

Not determined.

9.2 Other information

· **Important information on protection of health and environment, and on safety.**

· **Explosive properties:**

Product does not present an explosion hazard.

· **Information with regard to physical hazard classes**

· **Explosives**

Void

· **Flammable gases**

Void

· **Aerosols**

Void

· **Oxidising gases**

Void

· **Gases under pressure**

Void

· **Flammable liquids**

Void

· **Flammable solids**

Void

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· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
 - **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Alkalis (formation of ammonia)
- **10.6 Hazardous decomposition products:** In case of fire, see section 5.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

- **Acute toxicity**

No quantitative toxicity data are available for this product.
Based on available data, the classification criteria are not met.

- **LD/LC50 values relevant for classification:**

12125-02-9 ammonium chloride

Oral LD50 1440 mg/kg (Rat)

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

- **11.2 Information on other hazards**

- **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

12125-02-9 ammonium chloride

LC50 209 mg/l, 96 h (Cyprinus carpio) (IUCLID)

- **12.2 Persistence and degradability** No further relevant information available.

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- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **12.5 Results of PBT and vPvB assessment** Not applicable.
- **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
 - **General notes:**
 - Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
 - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
 - **Recommendation**

Disposal must comply with the relevant local regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose the special waste.
 - **Uncleaned packaging:**
 - **Recommendation:**

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

Packagings that may not be cleansed are to be disposed of in the same manner as the product.
 - **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· 14.1 UN number or ID number	
· ADR/RID, ADN, IMDG, IATA	Void
· 14.2 UN proper shipping name	
· ADR/RID	Void
	Void
· ADN, IMDG, IATA	Void
· 14.3 Transport hazard class(es)	
· ADR/RID, ADN, IMDG, IATA	
· Class	Void
· 14.4 Packing group	
· ADR/RID, IMDG, IATA	Void
· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user	Not applicable.
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· UN "Model Regulation":	Void

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
 - **Directive 2012/18/EU**
 - **Named dangerous substances - ANNEX I** None of the ingredients is listed.
 - **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 65

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· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

· **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

· **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

· Relevant phrases

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

· **Date of previous version:** 12.10.2021

· **Version number of previous version:** 4

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2