Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 30.01.2023 Version number 3 (replaces version 2) Revision: 26.01.2023

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

· **1.1 Product identifier**

· **Trade name: L 9184**

· **Article number:** 285138024

· **Description:** Standard buffer solution pH 9.18 (25 °C)

· **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:** Calibration solution

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

Xylem Analytics Germany GmbH
Dr.-Karl-Slevogt-Str. 1
82362 Weilheim
Germany

Contact: SI Analytics, Mainz
Tel. +49.(0)6131.66.5111

· **Further information obtainable from:** E-Mail: msds.si@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:**



GHS08 health hazard

Repr. 1B H360FD May damage fertility. May damage the unborn child.

· **2.2 Label elements:**

· **Labelling according to Regulation (EC) No 1272/2008:**
The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms:** GHS08

· **Signal word:** Danger

· **Hazard-determining components of labelling:**
Disodium tetraborate, decahydrate

· **Hazard statements:**
H360FD May damage fertility. May damage the unborn child.

· **Precautionary statements:**
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313 IF exposed or concerned: Get medical advice/attention.
P405 Store locked up.

· **Additional information:**
Restricted to professional users.

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 30.01.2023 Version number 3 (replaces version 2) Revision: 26.01.2023

Trade name: L 9184

(Contd. of page 1)

· **2.3 Other hazards** No further relevant information available.

SECTION 3: Composition/information on ingredients

· **3.2 Mixtures**

· **Description:**
Mixture, consisting of the following components:
Water, disodium tetraborate decahydrate

· **Dangerous components:**

CAS: 1303-96-4 EINECS: 215-540-4 Index number: 005-011-00-4	Disodium tetraborate, decahydrate	Repr. 1B, H360FD	0.1-≤1%

· **SVHC**

1303-96-4	Disodium tetraborate, decahydrate

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

SECTION 4: First aid measures

· **4.1 Description of first aid measures**

· **After inhalation:** Supply fresh air.

· **After skin contact:**
Wash with plenty of water.
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. Then consult a doctor.

· **After swallowing:**
Rinse out mouth and then drink plenty of water.
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** Boron oxide

· **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**
Wear personal protective equipment (see section 8).

· **6.2 Environmental precautions:** No special measures required.

· **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.

(Contd. on page 3)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 30.01.2023 Version number 3 (replaces version 2) Revision: 26.01.2023

Trade name: L 9184

(Contd. of page 2)

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 tigthly sealed at temperatures between 15 °C and 25 °C.
· **7.3 Specific end use(s)** No further relevant information available.

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:** Use suitable respiratory protective device only when aerosol or mist is formed.
· **Recommended filter device for short term use:** Combination filter B-P2
· **Hand protection** Protective gloves
· **Material of gloves** Nitrile rubber, NBR
· **Eye/face protection** Safety glasses
· **Environmental exposure controls** Not hazardous for water.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**
· **General Information**

· **Colour:**	Colourless
· **Odour:**	Odourless
· **Melting point/freezing point:**	-0.3 °C
· **Boiling point or initial boiling point and boiling range**	100 °C
· **Flammability**	Product is not flammable.
· **Flash point:**	Not applicable.
· **pH at 20 °C**	9.18
· **Viscosity:**	
· **Kinematic viscosity**	Not determined.
· **Dynamic:**	Not determined.
· **Solubility**	
· **water:**	Fully miscible.

(Contd. on page 4)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 30.01.2023 Version number 3 (replaces version 2) Revision: 26.01.2023

Trade name: L 9184

(Contd. of page 3)

· **Vapour pressure at 20 °C:**	23 hPa
· **Density and/or relative density**	
· **Density at 20 °C:**	1 g/cm³
· **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
· **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:** No further relevant information available.
· **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** Based on available data, the classification criteria are not met.

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

1303-96-4 Disodium tetraborate, decahydrate

Oral	LD50	2660 mg/kg (Rat) (RTECS)
Dermal	LD50	> 2000 mg/kg (Rat) (IUCLID)

· **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.

(Contd. on page 5)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 30.01.2023 Version number 3 (replaces version 2) Revision: 26.01.2023

Trade name: L 9184

(Contd. of page 4)

· **Reproductive toxicity**
May damage fertility. May damage the unborn child.
· **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:**	
1303-96-4 Disodium tetraborate, decahydrate	
EC50	1085 – 1402 mg/l, 48 h (Daphnia magna) (IUCLID)
LC50	630 mg/l, 72 h (Carassius auratus) (IUCLID)

· **12.2 Persistence and degradability** No further relevant information available.
· **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:** Not hazardous for water.
· **Additional ecological information:**
· **General notes:** Not hazardous for water.
· **Additional ecological information:** Not hazardous for water.

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.

· **European waste catalogue**	
06 00 00	WASTES FROM INORGANIC CHEMICAL PROCESSES
06 03 00	wastes from the MFSU of salts and their solutions and metallic oxides
06 03 14	solid salts and solutions other than those mentioned in 06 03 11 and 06 03 13

· **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

(Contd. on page 6)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 30.01.2023 Version number 3 (replaces version 2) Revision: 26.01.2023

Trade name: L 9184

(Contd. of page 5)

· **14.2 UN proper shipping name**	
· **ADR/RID, 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: 3, 30

· **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.

· **National regulations:**

· **Other regulations, limitations and prohibitive regulations**

· **Substances of very high concern (SVHC) according to REACH, Article 57**

1303-96-4	Disodium tetraborate, decahydrate

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

SECTION 16: Other information

· **Relevant phrases**

H360FD May damage fertility. May damage the unborn child.

· **Date of previous version:** 06.04.2022

(Contd. on page 7)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 30.01.2023 Version number 3 (replaces version 2) Revision: 26.01.2023

Trade name: L 9184

(Contd. of page 6)

· **Version number of previous version:** 2

· **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
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Repr. 1B: Reproductive toxicity – Category 1B