

19.09.2024

### Kit Components

Product code	Description
<b>CAY643-VxxAAE</b>	<b>CA71SI Reagent Set for silicate</b>

Components:

51513729	Reagent SI1 for silicate
51513730	Reagent SI2 for silicate
71256073	Reagent SI3 for silicate
4.160	Standard solution SiO <sub>2</sub> 0 µg/L

**SECTION 1: Identification of the substance or mixture and of the supplier****Product identifier****Trade name:** Reagent SI1**Synonym:** *for silicate***Article number:** 51513729**Recommended use of the chemical and restrictions on use** *No further relevant information available.***Application of the substance / the mixture** *Laboratory chemicals***Supplier's details****Manufacturer/Supplier:***Endress+Hauser**Conducta GmbH+Co. KG**Dieselstraße 24**D-70839 Gerlingen***Further information obtainable from:***Phone: +49 (0)7156 209-10117**E-Mail: MSDS.PCC@endress.com***Emergency phone number** +27 (0)861 555 777**SECTION 2: Hazard identification****Classification of the substance or mixture***corrosion**Skin Corr. 1A H314 Causes severe skin burns and eye damage.**Eye Dam. 1 H318 Causes serious eye damage.***GHS label elements****GHS label elements***The product is classified and labelled according to the Globally Harmonised System (GHS).***Hazard pictograms**

GHS05

**Signal word** *Danger***Hazard-determining components of labelling:***sulphuric acid**sodium hydrogensulphate***Hazard statements***Causes severe skin burns and eye damage.***Precautionary statements***IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].**IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**Immediately call a POISON CENTER/doctor.**Specific treatment (see on this label).**Store locked up.**Dispose of contents/container in accordance with local/regional/national/international regulations.***Additional information:***Product contains: Reportable explosives precursors. Making available, introduction, possession and use according to Regulation (EU) 2019/1148, Article 9.*

**Trade name: Reagent S11**

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**Other hazards**

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

**Results of PBT and vPvB assessment**

**PBT:** Not applicable.

**vPvB:** Not applicable.

**SECTION 3: Composition or information on ingredients****Mixtures**

**Description:** Mixture of substances listed below with nonhazardous additions.

**Dangerous components:**

CAS: 7664-93-9 EINECS: 231-639-5	sulphuric acid Skin Corr. 1A, H314 Specific concentration limits: Skin Corr. 1A; H314: $C \geq 15\%$ Skin Irrit. 2; H315: $5\% \leq C < 15\%$ Eye Irrit. 2; H319: $5\% \leq C < 15\%$	5-10%
CAS: 7681-38-1 EINECS: 231-665-7	sodium hydrogensulphate Eye Dam. 1, H318	2-6%
CAS: 7782-91-4 EINECS: 231-970-5	molybdic acid STOT RE 2, H373; Eye Irrit. 2, H319; STOT SE 3, H335	2-6%

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

**SECTION 4: First-aid measures****Description of necessary first-aid measures**

**General information:** Immediately remove any clothing soiled by the product.

**After inhalation:** In case of unconsciousness place patient stably in side position for transportation.

**After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

Immediately rinse with water.

**After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.

**Most important symptoms or effects, acute and delayed** No further relevant information available.

**Indication of immediate medical attention and special treatment needed, if necessary**

No further relevant information available.

**SECTION 5: Fire-fighting measures****Suitable extinguishing media****Suitable extinguishing agents:**

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**For safety reasons unsuitable extinguishing agents:** no further information

**Specific hazards arising from the chemical**

During heating or in case of fire poisonous gases are produced.

**Special protective actions for fire fighters** No further relevant information available.

**Protective equipment:** Mount respiratory protective device.

**SECTION 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

Wear protective clothing.

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**Trade name: Reagent S11**

(Contd. of page 2)

**Environmental precautions:**

*Dilute with plenty of water.*

*Do not allow to enter sewers/ surface or ground water.*

**Methods and material for containment and cleaning up:**

*Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).*

*Use neutralising agent.*

*Dispose contaminated material as waste according to section 13.*

*Ensure adequate ventilation.*

**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**

**Precautions for safe handling**

*Ensure good ventilation/exhaustion at the workplace.*

*Prevent formation of aerosols.*

**Information about fire - and explosion protection:** *Keep respiratory protective device available.*

**Conditions for safe storage, including any incompatibilities**

**Storage:**

**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:** *Keep container tightly sealed.*

**Storage class:** *8 B*

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

**SECTION 8: Exposure controls or personal protection**

**Control parameters**

**Ingredients with limit values that require monitoring at the workplace:**

**CAS: 7664-93-9 sulphuric acid**

OEL	Long-term value: 0.4* mg/m <sup>3</sup> *T, CARC
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**CAS: 7782-91-4 molybdic acid**

OEL	Long-term value: 1 mg/m <sup>3</sup> as Mo; respirable fraction
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**DNELs**

**CAS: 7664-93-9 sulphuric acid**

Inhalative	DNEL short-term	0.1 mg/m <sup>3</sup> (worker) (local effects)
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	DNEL long-term	0.05 mg/m <sup>3</sup> (worker) (local effects)
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**PNECs**

**CAS: 7664-93-9 sulphuric acid**

PNEC	8.8 mg/L (Wastewater treatment plant)
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	0.25 mg/L (sea water)
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PNEC	2.5 µg/L (fresh water)
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PNEC	2 µg/kg (marine sediment)
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	2 µg/kg (freshwater sediment)
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**Additional information:** *The lists valid during the making were used as basis.*

**Exposure controls**

**Appropriate engineering controls** *No further data; see section 7.*

(Contd. on page 4)

**Trade name: Reagent S11**

(Contd. of page 3)

**Individual protection measures, such as personal protective equipment (PPE)****General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.  
 Immediately remove all soiled and contaminated clothing  
 Wash hands before breaks and at the end of work.  
 Avoid contact with the eyes.  
 Avoid contact with the eyes and skin.

**Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

**Hand protection**

Protective gloves

To avoid skin problems reduce the wearing of gloves to the required minimum.  
 Only use chemical-protective gloves with CE-labelling of category III.  
 The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

**Material of gloves**

Nitrile rubber, NBR

Chloroprene rubber, CR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye or face protection**

Tightly sealed goggles

**Body protection:** Protective work clothing

**SECTION 9: Physical and chemical properties****Information on basic physical and chemical properties****General Information****Physical state**

Fluid

**Colour:**

Yellow tint

**Odour:**

Characteristic

**Odour threshold:**

Not determined.

**Melting point/freezing point:**

Undetermined.

**نقطة الغليان أو نقطة الغليان الأولية ونطاق الغليان**

&gt;100 °C

**Flammability**

Not applicable.

**Upper or lower flammability or explosive limits****Lower:**

Not determined.

**Upper:**

Not determined.

**Flash point:**

Not applicable.

**Decomposition temperature:**

Not determined.

**pH at 20 °C**

&lt;2

**Viscosity:****Viscosity**

Not determined.

(Contd. on page 5)

## Trade name: Reagent S11

(Contd. of page 4)

<b>Dynamic:</b>	<i>Not determined.</i>
<b>Solubility</b>	
<b>water:</b>	<i>Fully miscible.</i>
<b>Partition coefficient: n-octanol or water</b>	<i>Not determined.</i>
<b>Vapour pressure at 20 °C:</b>	<i>23 hPa</i>
<b>Vapour density + Relative density</b>	
<b>Density:</b>	<i>Not determined.</i>
<b>Relative density</b>	<i>Not determined.</i>
<b>Vapour density</b>	<i>Not determined.</i>
<b>Other information</b>	
<b>Appearance:</b>	
<b>Form:</b>	<i>Liquid</i>
<b>Important information on protection of health and environment, and on safety.</b>	
<b>Ignition temperature:</b>	<i>Product is not selfigniting.</i>
<b>Explosive properties:</b>	<i>Product does not present an explosion hazard. Not determined.</i>
<b>Solvent content:</b>	
<b>Water:</b>	<i>81.4 %</i>
<b>Solids content:</b>	<i>0.0 %</i>
<b>Change in condition</b>	
<b>Evaporation rate</b>	<i>Not determined.</i>
<b>Information with regard to physical hazard classes</b>	
<b>Explosives</b>	<i>Void</i>
<b>Flammable gases</b>	<i>Void</i>
<b>Aerosols</b>	<i>Void</i>
<b>Oxidising gases</b>	<i>Void</i>
<b>Gases under pressure</b>	<i>Void</i>
<b>Flammable liquids</b>	<i>Void</i>
<b>Flammable solids</b>	<i>Void</i>
<b>Self-reactive substances and mixtures</b>	<i>Void</i>
<b>Pyrophoric liquids</b>	<i>Void</i>
<b>Pyrophoric solids</b>	<i>Void</i>
<b>Self-heating substances and mixtures</b>	<i>Void</i>
<b>Substances and mixtures, which emit flammable gases in contact with water</b>	<i>Void</i>
<b>Oxidising liquids</b>	<i>Void</i>
<b>Oxidising solids</b>	<i>Void</i>
<b>Organic peroxides</b>	<i>Void</i>
<b>Corrosive to metals</b>	<i>Void</i>
<b>Desensitised explosives</b>	<i>Void</i>

**SECTION 10: Stability and reactivity****Reactivity** *No further relevant information available.***Chemical stability****Thermal decomposition / conditions to be avoided:***No decomposition if used according to specifications.***Possibility of hazardous reactions** *No dangerous reactions known.***Conditions to avoid** *No further relevant information available.***Incompatible materials:** *No further relevant information available.***Hazardous decomposition products:** *No dangerous decomposition products known.*

(Contd. on page 6)

Trade name: Reagent S11

(Contd. of page 5)

**SECTION 11: Toxicological information****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:****CAS: 7681-38-1 sodium hydrogensulphate**

Oral | LD50 | 2,490 mg/kg (rat)

**CAS: 7782-91-4 molybdic acid**

Oral | LD50 | 2,689 mg/kg (rat)

**Skin corrosion or irritation** Causes severe skin burns and eye damage.**Serious eye damage or irritation** Causes serious eye damage.**Information on other hazards****endocrine disrupting potential**

None of the ingredients is listed.

**SECTION 12: Ecological information****Toxicity****Aquatic toxicity:** No further relevant information available.**Persistence and degradability** No further relevant information available.**Bioaccumulative potential** No further relevant information available.**Mobility in soil** No further relevant information available.**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

**Other adverse effects****Additional ecological information:****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.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

**SECTION 13: Disposal considerations****Waste treatment methods****Recommendation**

Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

**Uncleaned packaging:****Recommendation:** Disposal must be made according to official regulations.**Recommended cleansing agents:** Water, if necessary together with cleansing agents.**\* SECTION 14: Transport information****UN number****IMDG, IATA**

UN2796

(Contd. on page 7)

—ZA—

**Trade name: Reagent S11**

(Contd. of page 6)

**UN proper shipping name**

**ADR**

UN2796 SULPHURIC ACID

**IMDG**

SULPHURIC ACID

**IATA**

Sulphuric acid

**Transport hazard class(es)**

**ADR**



**Class**

8 (C1) Corrosive substances.

**Label**

8

**IMDG, IATA**



**Class**

8 Corrosive substances.

**Label**

8

**Packing group**

II

**ADR, IMDG, IATA**

**Environmental hazards:**

Not applicable.

**Special precautions for user**

Warning: Corrosive substances.

**Hazard identification number (Kemler code):**

80

**EMS Number:**

F-A,S-B

**Segregation groups**

(SGG1a) Strong acids

**Stowage Category**

B

**Segregation Code**

SG36 Stow "separated from" SGG18-alkalis.  
SG49 Stow "separated from" SGG6-cyanides

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable.

**Transport/Additional information:**

**ADR**

**Limited quantities (LQ)**

1L

**Transport category**

2

**Tunnel restriction code**

E

**IMDG**

**Limited quantities (LQ)**

1L

**Excepted quantities (EQ)**

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

**UN "Model Regulation":**

UN 2796 SULPHURIC ACID, 8, II

## SECTION 15: Regulatory information

**Safety, health and environmental regulations specific for the product in question**

**GHS label elements**

The product is classified and labelled according to the Globally Harmonised System (GHS).

**Hazard pictograms**



GHS05

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**Trade name: Reagent S11**

(Contd. of page 7)

**Signal word** *Danger***Hazard-determining components of labelling:***sulphuric acid**sodium hydrogensulphate***Hazard statements***Causes severe skin burns and eye damage.***Precautionary statements***IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].**IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**Immediately call a POISON CENTER/doctor.**Specific treatment (see on this label).**Store locked up.**Dispose of contents/container in accordance with local/regional/national/international regulations.***Directive 2012/18/EU****Named dangerous substances - ANNEX I** *None of the ingredients is listed.***National regulations:****Waterhazard class:** *Water hazard class 1 (Self-assessment): slightly hazardous for water.***Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.***SECTION 16: Other information**

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

**Department issuing SDS:** *PCC-TWR***Contact:** *MSDS.pcc@endress.com***Abbreviations and acronyms:***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**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)**DNEL: Derived No-Effect Level (REACH)**PNEC: Predicted No-Effect Concentration (REACH)**LC50: Lethal concentration, 50 percent**LD50: Lethal dose, 50 percent**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Skin Corr. 1A: Skin corrosion/irritation – Category 1A**Eye Dam. 1: Serious eye damage/eye irritation – Category 1**Eye Irrit. 2: Serious eye damage/eye irritation – Category 2**STOT SE 3: Specific target organ toxicity (single exposure) – Category 3**STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2***\* Data compared to the previous version altered.**

## SECTION 1: Identification of the substance or mixture and of the supplier

### Product identifier

**Trade name:** Reagent SI2

**Synonym:** *for silicate*

**Article number:** 51513730

**Recommended use of the chemical and restrictions on use** *No further relevant information available.*

**Application of the substance / the mixture** *Laboratory chemicals*

### Supplier's details

**Manufacturer/Supplier:**

*Endress+Hauser*

*Conducta GmbH+Co. KG*

*Dieselstraße 24*

*D-70839 Gerlingen*

**Further information obtainable from:**

*Phone: +49 (0)7156 209-10117*

*E-Mail: MSDS.PCC@endress.com*

**Emergency phone number** +27 (0)861 555 777

## SECTION 2: Hazard identification

### Classification of the substance or mixture



*Eye Irrit. 2 H319 Causes serious eye irritation.*

### GHS label elements

**GHS label elements**

*The product is classified and labelled according to the Globally Harmonised System (GHS).*

### Hazard pictograms



GHS07

**Signal word** *Warning*

**Hazard statements**

*Causes serious eye irritation.*

**Precautionary statements**

*Wash thoroughly after handling.*

*Wear eye protection / face protection.*

*IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*

*If eye irritation persists: Get medical advice/attention.*

**Other hazards**

*The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.*

**Results of PBT and vPvB assessment**

**PBT:** *Not applicable.*

**vPvB:** *Not applicable.*

## SECTION 3: Composition or information on ingredients

### Mixtures

**Description:** *Mixture of substances listed below with nonhazardous additions.*


(Contd. on page 2)

— ZA —

Trade name: Reagent SI2

(Contd. of page 1)

**Dangerous components:**

CAS: 77-92-9 EINECS: 201-069-1	citric acid	 Eye Irrit. 2, H319; STOT SE 3, H335	10-20%
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Additional information: For the wording of the listed hazard phrases refer to section 16.

**SECTION 4: First-aid measures****Description of necessary first-aid measures****After inhalation:** Supply fresh air; consult doctor in case of complaints.**After skin contact:** Generally the product does not irritate the skin.**After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

**After swallowing:** If symptoms persist consult doctor.**Most important symptoms or effects, acute and delayed** No further relevant information available.**Indication of immediate medical attention and special treatment needed, if necessary**

No further relevant information available.

**SECTION 5: Fire-fighting measures****Suitable extinguishing media****Suitable extinguishing agents:**CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.**For safety reasons unsuitable extinguishing agents:** no further information**Specific hazards arising from the chemical** No further relevant information available.**Special protective actions for fire fighters** No further relevant information available.**Protective equipment:** No special measures required.**SECTION 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures** Wear protective clothing.**Environmental precautions:**

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

**Methods and material for containment and cleaning up:**

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

**Reference to other sections**

No dangerous substances are released.

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****Precautions for safe handling** No special precautions are necessary if used correctly.**Information about fire - and explosion protection:** No special measures required.**Conditions for safe storage, including any incompatibilities****Storage:****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:** Keep container tightly sealed.**Storage class:** 12**Specific end use(s)** No further relevant information available.

(Contd. on page 3)

Trade name: Reagent SI2

(Contd. of page 2)

**SECTION 8: Exposure controls or personal protection****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.*

**Exposure controls**

**Appropriate engineering controls** *No further data; see section 7.*

**Individual protection measures, such as personal protective equipment (PPE)**

**General protective and hygienic measures:**

*Keep away from foodstuffs, beverages and feed.*

*Immediately remove all soiled and contaminated clothing*

*Wash hands before breaks and at the end of work.*

*Avoid contact with the eyes.*

*Avoid contact with the eyes and skin.*

**Respiratory protection:** *Not required.*

**Hand protection**

Protective gloves

*To avoid skin problems reduce the wearing of gloves to the required minimum.*

*Only use chemical-protective gloves with CE-labelling of category III.*

*The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.*

**Material of gloves**

*Nitrile rubber, NBR*

*The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.*

**Penetration time of glove material**

*The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*

**Eye or face protection**

Tightly sealed goggles

**Body protection:** *Protective work clothing*

**SECTION 9: Physical and chemical properties****Information on basic physical and chemical properties****General Information**

**Physical state**

*Fluid*

**Colour:**

*Clear*

**Odour:**

*Odourless*

**Odour threshold:**

*Not determined.*

**Melting point/freezing point:**

*Undetermined.*

**نقطة الغليان أو نقطة الغليان الأولية ونطاق الغليان**

*>100 °C*

**Flammability**

*Not applicable.*

(Contd. on page 4)

**Trade name: Reagent SI2**

(Contd. of page 3)

<b>Upper or lower flammability or explosive limits</b>	
Lower:	<i>Not determined.</i>
Upper:	<i>Not determined.</i>
Flash point:	<i>Not applicable.</i>
Auto-ignition temperature:	1 °C
Decomposition temperature:	<i>Not determined.</i>
pH at 20 °C	<2
Viscosity:	
Viscosity	<i>Not determined.</i>
Dynamic:	<i>Not determined.</i>
Solubility	
water:	<i>Fully miscible.</i>
Partition coefficient: n-octanol or water	<i>Not determined.</i>
Vapour pressure at 20 °C:	23 hPa
Vapour density + Relative density	
Density at 20 °C:	1.096 g/cm <sup>3</sup>
Relative density	<i>Not determined.</i>
Vapour density	<i>Not determined.</i>
<b>Other information</b>	
Appearance:	
Form:	<i>Liquid</i>
<b>Important information on protection of health and environment, and on safety.</b>	
Ignition temperature:	<i>Product is not selfigniting.</i>
Explosive properties:	<i>Product does not present an explosion hazard. Not determined.</i>
<b>Solvent content:</b>	
Water:	84.3 %
Solids content:	0.0 %
Change in condition	
Evaporation rate	<i>Not determined.</i>
<b>Information with regard to physical hazard classes</b>	
Explosives	<i>Void</i>
Flammable gases	<i>Void</i>
Aerosols	<i>Void</i>
Oxidising gases	<i>Void</i>
Gases under pressure	<i>Void</i>
Flammable liquids	<i>Void</i>
Flammable solids	<i>Void</i>
Self-reactive substances and mixtures	<i>Void</i>
Pyrophoric liquids	<i>Void</i>
Pyrophoric solids	<i>Void</i>
Self-heating substances and mixtures	<i>Void</i>
Substances and mixtures, which emit flammable gases in contact with water	<i>Void</i>
Oxidising liquids	<i>Void</i>
Oxidising solids	<i>Void</i>
Organic peroxides	<i>Void</i>
Corrosive to metals	<i>Void</i>
Desensitised explosives	<i>Void</i>

**SECTION 10: Stability and reactivity**

Reactivity *No further relevant information available.*

(Contd. on page 5)

**Trade name: Reagent SI2**

(Contd. of page 4)

**Chemical stability****Thermal decomposition / conditions to be avoided:***No decomposition if used according to specifications.***Possibility of hazardous reactions** *No dangerous reactions known.***Conditions to avoid** *No further relevant information available.***Incompatible materials:** *No further relevant information available.***Hazardous decomposition products:** *No dangerous decomposition products known.***SECTION 11: Toxicological information****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:****CAS: 77-92-9 citric acid**

Oral | LD50 | 5,040 mg/kg (mouse)

**Serious eye damage or irritation** *Causes serious eye irritation.***Information on other hazards****endocrine disrupting potential***None of the ingredients is listed.***SECTION 12: Ecological information****Toxicity****Aquatic toxicity:** *No further relevant information available.***Persistence and degradability** *No further relevant information available.***Bioaccumulative potential** *No further relevant information available.***Mobility in soil** *No further relevant information available.***Results of PBT and vPvB assessment****PBT:** *Not applicable.***vPvB:** *Not applicable.***Endocrine disrupting properties***The product does not contain substances with endocrine disrupting properties.***Other adverse effects****Additional ecological information:****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.**Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.***SECTION 13: Disposal considerations****Waste treatment methods****Recommendation***Must not be disposed together with household garbage. Do not allow product to reach sewage system.***Uncleaned packaging:****Recommendation:** *Disposal must be made according to official regulations.***Recommended cleansing agents:** *Water, if necessary together with cleansing agents.***SECTION 14: Transport information****UN number****ADN, IMDG, IATA**

Void

(Contd. on page 6)

Trade name: Reagent SI2

(Contd. of page 5)

<b>UN proper shipping name</b>	
<b>ADR, ADN, IMDG, IATA</b>	Void
<b>Transport hazard class(es)</b>	
<b>ADR, ADN, IMDG, IATA</b>	
<b>Class</b>	Void
<b>Packing group</b>	
<b>ADR, IMDG, IATA</b>	Void
<b>Environmental hazards:</b>	Not applicable.
<b>Special precautions for user</b>	Not applicable.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.
<b>UN "Model Regulation":</b>	Void

## SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

### GHS label elements

The product is classified and labelled according to the Globally Harmonised System (GHS).

### Hazard pictograms



GHS07

### Signal word *Warning*

### Hazard statements

*Causes serious eye irritation.*

### Precautionary statements

*Wash thoroughly after handling.*

*Wear eye protection / face protection.*

*IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*

*If eye irritation persists: Get medical advice/attention.*

### Directive 2012/18/EU

**Named dangerous substances - ANNEX I** *None of the ingredients is listed.*

### National regulations:

**Waterhazard class:** *Water hazard class 1 (Self-assessment): slightly hazardous for water.*

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

## SECTION 16: Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

**Department issuing SDS:** PCC-TWR

**Contact:** MSDS.pcc@endress.com

### Abbreviations and acronyms:

*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*

*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*

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

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# Safety data Sheet

in accordance with SANS

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Printing date 19.09.2024

Version 5 (replaces version 4)

Revision: 19.09.2024

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**Trade name: Reagent SI2**

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*STOT SE 3: Specific target organ toxicity (single exposure) – Category 3*

(Contd. of page 6)

**\* Data compared to the previous version altered.**

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— ZA —



**SECTION 1: Identification of the substance or mixture and of the supplier****Product identifier****Trade name:** Reagent SI3**Synonym:** *for silicate***Article number:** 71256073**Recommended use of the chemical and restrictions on use** *No further relevant information available.***Application of the substance / the mixture** *Laboratory chemicals***Supplier's details****Manufacturer/Supplier:***Endress+Hauser**Conducta GmbH+Co. KG**Dieselstraße 24**D-70839 Gerlingen***Further information obtainable from:***Phone: +49 (0)7156 209-10117**E-Mail: MSDS.PCC@endress.com***Emergency phone number** +27 (0)861 555 777**SECTION 2: Hazard identification****Classification of the substance or mixture***corrosion**Eye Dam. 1 H318 Causes serious eye damage.**Skin Sens. 1 H317 May cause an allergic skin reaction.**Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.***GHS label elements****GHS label elements***The product is classified and labelled according to the Globally Harmonised System (GHS).***Hazard pictograms**

GHS05 GHS07

**Signal word** *Danger***Hazard-determining components of labelling:***disodium disulphite**bis(4-hydroxy-N-methylanilinium) sulfate***Hazard statements***Causes serious eye damage.**May cause an allergic skin reaction.**Harmful to aquatic life with long lasting effects.***Precautionary statements***IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**Immediately call a POISON CENTER/doctor.**Specific treatment (see on this label).*

**Trade name: Reagent SI3**

(Contd. of page 1)

*Take off contaminated clothing and wash it before reuse.**Dispose of contents/container in accordance with local/regional/national/international regulations.***Additional information:***Contact with acids liberates toxic gas.***Other hazards***The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.***Results of PBT and vPvB assessment****PBT:** *Not applicable.***vPvB:** *Not applicable.***SECTION 3: Composition or information on ingredients****Mixtures****Description:** *Mixture of substances listed below with nonhazardous additions.*

<b>Dangerous components:</b>		
CAS: 7681-57-4 EINECS: 231-673-0	disodium disulphite ☞ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302, EUH031	10-20%
CAS: 55-55-0 EINECS: 200-237-1	bis(4-hydroxy-N-methylanilinium) sulfate ☞ STOT RE 2, H373; ☞ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Acute Tox. 4, H302; Skin Sens. 1, H317	1-2.5%

**Additional information:** *For the wording of the listed hazard phrases refer to section 16.***SECTION 4: First-aid measures****Description of necessary first-aid measures****General information:** *Immediately remove any clothing soiled by the product.***After inhalation:***Supply fresh air and to be sure call for a doctor.**In case of unconsciousness place patient stably in side position for transportation.***After skin contact:***Immediately wash with water and soap and rinse thoroughly.**Immediately rinse with water.***After eye contact:** *Rinse opened eye for several minutes under running water. Then consult a doctor.***After swallowing:** *If symptoms persist consult doctor.***Most important symptoms or effects, acute and delayed** *No further relevant information available.***Indication of immediate medical attention and special treatment needed, if necessary***No further relevant information available.***SECTION 5: Fire-fighting measures****Suitable extinguishing media****Suitable extinguishing agents:***CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.***For safety reasons unsuitable extinguishing agents:** *no further information***Specific hazards arising from the chemical** *No further relevant information available.***Special protective actions for fire fighters** *No further relevant information available.***Protective equipment:** *Mount respiratory protective device.***SECTION 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures***Mount respiratory protective device.**Wear protective equipment. Keep unprotected persons away.*

(Contd. on page 3)

**Trade name: Reagent SI3**

(Contd. of page 2)

*Wear protective clothing.***Environmental precautions:***Do not allow product to reach sewage system or any water course.**Inform respective authorities in case of seepage into water course or sewage system.**Dilute with plenty of water.**Do not allow to enter sewers/ surface or ground water.***Methods and material for containment and cleaning up:***Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).**Use neutralising agent.**Dispose contaminated material as waste according to section 13.**Ensure adequate ventilation.***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****Precautions for safe handling***Ensure good ventilation/exhaustion at the workplace.**Prevent formation of aerosols.***Information about fire - and explosion protection:** *No special measures required.***Conditions for safe storage, including any incompatibilities****Storage:****Requirements to be met by storerooms and receptacles:** *No special requirements.***Information about storage in one common storage facility:** *Do not store together with acids.***Further information about storage conditions:** *Keep container tightly sealed.***Storage class:** 12**Specific end use(s)** *No further relevant information available.***\* SECTION 8: Exposure controls or personal protection****Control parameters****Ingredients with limit values that require monitoring at the workplace:****CAS: 7681-57-4 disodium disulphite**OEL | Long-term value: 10 mg/m<sup>3</sup>**Additional information:** *The lists valid during the making were used as basis.***Exposure controls****Appropriate engineering controls** *No further data; see section 7.***Individual protection measures, such as personal protective equipment (PPE)****General protective and hygienic measures:***Keep away from foodstuffs, beverages and feed.**Immediately remove all soiled and contaminated clothing**Wash hands before breaks and at the end of work.**Avoid contact with the eyes.**Avoid contact with the eyes and skin.***Respiratory protection:***In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.***Hand protection**

Protective gloves

(Contd. on page 4)

**Trade name: Reagent SI3**

(Contd. of page 3)

To avoid skin problems reduce the wearing of gloves to the required minimum.

Only use chemical-protective gloves with CE-labelling of category III.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

**Material of gloves**

Nitrile rubber, NBR

Natural rubber, NR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye or face protection**

Tightly sealed goggles

**Body protection:** Protective work clothing

**SECTION 9: Physical and chemical properties****Information on basic physical and chemical properties****General Information****Physical state**

Fluid

**Colour:**

Colourless

**Odour:**

Characteristic

**Odour threshold:**

Not determined.

**Melting point/freezing point:**

Undetermined.

نقطة الغليان أو نقطة الغليان الأولية ونطاق الغليان

100 °C

**Flammability**

Not applicable.

**Upper or lower flammability or explosive limits****Lower:**

Not determined.

**Upper:**

Not determined.

**Flash point:**

Not applicable.

**Decomposition temperature:**

Not determined.

**pH**

Slightly acidic

**Viscosity:****Viscosity**

Not determined.

**Dynamic:**

Not determined.

**Solubility****water:**

Fully miscible.

**Partition coefficient: n-octanol or water**

Not determined.

**Vapour pressure at 20 °C:**

23 hPa

**Vapour density + Relative density****Density at 20 °C:**

1.029 g/cm<sup>3</sup>

**Relative density**

Not determined.

**Vapour density**

Not determined.

**Other information****Appearance:****Form:**

Fluid

**Important information on protection of health and environment, and on safety.****Ignition temperature:**

Product is not selfigniting.

(Contd. on page 5)

**Trade name: Reagent SI3**

(Contd. of page 4)

**Explosive properties:** *Product does not present an explosion hazard.  
Not determined.*

**Solvent content:**  
**Water:** 82.8 %

**Solids content:** 0.0 %

**Change in condition**  
**Evaporation rate** *Not determined.*

**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**

**Reactivity** *No further relevant information available.*

**Chemical stability**

**Thermal decomposition / conditions to be avoided:**

*No decomposition if used according to specifications.*

**Possibility of hazardous reactions** *No dangerous reactions known.*

**Conditions to avoid** *No further relevant information available.*

**Incompatible materials:** *No further relevant information available.*

**Hazardous decomposition products:** *No dangerous decomposition products known.*

**SECTION 11: Toxicological information**

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

**Acute toxicity** *Based on available data, the classification criteria are not met.*

**Serious eye damage or irritation** *Causes serious eye damage.*

**Respiratory and skin sensitization** *May cause an allergic skin reaction.*

**Information on other hazards**

**endocrine disrupting potential**

*None of the ingredients is listed.*

**SECTION 12: Ecological information**

**Toxicity**

**Aquatic toxicity:** *No further relevant information available.*

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

**Bioaccumulative potential** *No further relevant information available.*

**Mobility in soil** *No further relevant information available.*

(Contd. on page 6)

**Trade name: Reagent SI3**

(Contd. of page 5)

**Results of PBT and vPvB assessment****PBT:** *Not applicable.***vPvB:** *Not applicable.***Endocrine disrupting properties***The product does not contain substances with endocrine disrupting properties.***Other adverse effects****Remark:** *Harmful to fish***Additional ecological information:****General notes:***Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water**Do not allow product to reach ground water, water course or sewage system.**Must not reach sewage water or drainage ditch undiluted or unneutralised.**Danger to drinking water if even small quantities leak into the ground.**Harmful to aquatic organisms***SECTION 13: Disposal considerations****Waste treatment methods****Recommendation***Must not be disposed together with household garbage. Do not allow product to reach sewage system.***Uncleaned packaging:****Recommendation:** *Disposal must be made according to official regulations.***Recommended cleansing agents:** *Water, if necessary together with cleansing agents.***SECTION 14: Transport information****UN number****ADN, IMDG, IATA** *Void***UN proper shipping name****ADR, ADN, IMDG, IATA** *Void***Transport hazard class(es)****ADR, ADN, IMDG, IATA****Class** *Void***Packing group****ADR, IMDG, IATA** *Void***Environmental hazards:** *Not applicable.***Special precautions for user** *Not applicable.***Transport in bulk according to Annex II of****MARPOL 73/78 and the IBC Code** *Not applicable.***UN "Model Regulation":** *Void***SECTION 15: Regulatory information****Safety, health and environmental regulations specific for the product in question****GHS label elements***The product is classified and labelled according to the Globally Harmonised System (GHS).***Hazard pictograms**

GHS05 GHS07

**Signal word** *Danger***Hazard-determining components of labelling:***disodium disulphite*

(Contd. on page 7)

**Trade name: Reagent SI3**

(Contd. of page 6)

*bis(4-hydroxy-N-methylanilinium) sulfate***Hazard statements***Causes serious eye damage.**May cause an allergic skin reaction.**Harmful to aquatic life with long lasting effects.***Precautionary statements***IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**Immediately call a POISON CENTER/doctor.**Specific treatment (see on this label).**Take off contaminated clothing and wash it before reuse.**Dispose of contents/container in accordance with local/regional/national/international regulations.***Directive 2012/18/EU****Named dangerous substances - ANNEX I** *None of the ingredients is listed.***National regulations:****Waterhazard class:** *Water hazard class 2 (Self-assessment): hazardous for water.***Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.***SECTION 16: Other information***This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.***Department issuing SDS:** *PCC-TWR***Contact:** *MSDS.pcc@endress.com***Abbreviations and acronyms:***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**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)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Acute Tox. 4: Acute toxicity – Category 4**Eye Dam. 1: Serious eye damage/eye irritation – Category 1**Skin Sens. 1: Skin sensitisation – Category 1**STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2**Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1**Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1**Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3***\* Data compared to the previous version altered.**

## SECTION 1: Identification of the substance or mixture and of the supplier

### Product identifier

Trade name:

**Standard solution SiO<sub>2</sub>**

**0 µg/l**

Synonym: 0 µg/L

CAS Number:

7732-18-5

EC number:

231-791-2

**Recommended use of the chemical and restrictions on use** *No further relevant information available.*

**Application of the substance / the mixture** *Laboratory chemicals*

### Supplier's details

**Manufacturer/Supplier:**

*Endress+Hauser*

*Conducta GmbH+Co. KG*

*Dieselstraße 24*

*D-70839 Gerlingen*

**Further information obtainable from:**

*Phone: +49 (0)7156 209-10117*

*E-Mail: MSDS.PCC@endress.com*

**Emergency phone number** *+27 (0)861 555 777*

## SECTION 2: Hazard identification

**Classification of the substance or mixture**

*The substance is not classified, according to the Globally Harmonised System (GHS).*

**GHS label elements**

**GHS label elements** *Void*

**Hazard pictograms** *Void*

**Signal word** *Void*

**Hazard statements** *Void*

**Other hazards**

**Results of PBT and vPvB assessment**

**PBT:** *Not applicable.*

**vPvB:** *Not applicable.*

## SECTION 3: Composition or information on ingredients

**Substances**

**CAS No. Description**

*CAS: 7732-18-5 water*

**Identification number(s)**

**EC number:** *231-791-2*

## SECTION 4: First-aid measures

**Description of necessary first-aid measures**

**General information:** *No special measures required.*

**After inhalation:** *Supply fresh air; consult doctor in case of complaints.*

**After skin contact:** *Generally the product does not irritate the skin.*

**After eye contact:** *Rinse opened eye for several minutes under running water.*

**After swallowing:** *If symptoms persist consult doctor.*



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**Trade name: Standard solution SiO2**

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(Contd. of page 1)

**Most important symptoms or effects, acute and delayed** *No further relevant information available.***Indication of immediate medical attention and special treatment needed, if necessary***No further relevant information available.*

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## SECTION 5: Fire-fighting measures

**Suitable extinguishing media****Suitable extinguishing agents:** *Use fire extinguishing methods suitable to surrounding conditions.***For safety reasons unsuitable extinguishing agents:** *no further information***Specific hazards arising from the chemical** *No further relevant information available.***Special protective actions for fire fighters** *No further relevant information available.***Protective equipment:** *No special measures required.*

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## SECTION 6: Accidental release measures

**Personal precautions, protective equipment and emergency procedures** *Wear protective clothing.***Environmental precautions:** *Dilute with plenty of water.***Methods and material for containment and cleaning up:***Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).***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.*

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## SECTION 7: Handling and storage

**Precautions for safe handling** *No special measures required.***Information about fire - and explosion protection:** *No special measures required.***Conditions for safe storage, including any incompatibilities****Storage:****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:** *None.***Storage class:** 12**Specific end use(s)** *No further relevant information available.*

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## SECTION 8: Exposure controls or personal protection

**Control parameters****Ingredients with limit values that require monitoring at the workplace:** *Not required.***Additional information:** *The lists valid during the making were used as basis.***Exposure controls****Appropriate engineering controls** *No further data; see section 7.***Individual protection measures, such as personal protective equipment (PPE)****General protective and hygienic measures:***The usual precautionary measures are to be adhered to when handling chemicals.***Respiratory protection:** *Not required.***Hand protection** *No chemical-protective gloves required.***Material of gloves***The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.*

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(Contd. on page 3)

Trade name: Standard solution SiO<sub>2</sub>

(Contd. of page 2)

**Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye or face protection** *Not required.*

**Body protection:** *Protective work clothing*

**SECTION 9: Physical and chemical properties****Information on basic physical and chemical properties****General Information****Physical state***Fluid***Colour:***Colourless***Odour:***Odourless***Odour threshold:***Not determined.***Melting point/freezing point:***0 °C***نقطة الغليان أو نقطة الغليان الأولية ونطاق الغليان***100 °C***Flammability***Not applicable.***Upper or lower flammability or explosive limits****Lower:***Not determined.***Upper:***Not determined.***Flash point:***Not applicable.***pH***Not determined.***Viscosity:****Viscosity***Not determined.***Dynamic at 20 °C:***0.952 mPas***Solubility****water:***Fully miscible.***Partition coefficient: n-octanol or water***Not determined.***Vapour pressure at 20 °C:***23 hPa***Vapour density + Relative density****Density at 20 °C:***1 g/cm<sup>3</sup>***Relative density***Not determined.***Vapour density***Not determined.***Other information****Appearance:****Form:***Fluid***Important information on protection of health and environment, and on safety.****Ignition temperature:***Not determined.***Explosive properties:***Product does not present an explosion hazard.**Not determined.***Water:***100.0 %***Solids content:***0.0 %***Molecular weight***18.02 g/mol***Change in condition****Evaporation rate***Not determined.***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*

(Contd. on page 4)

**Trade name: Standard solution SiO2**

(Contd. of page 3)

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

### SECTION 10: Stability and reactivity

**Reactivity** *No further relevant information available.*

**Chemical stability**

**Thermal decomposition / conditions to be avoided:**

*No decomposition if used according to specifications.*

**Possibility of hazardous reactions** *No dangerous reactions known.*

**Conditions to avoid** *No further relevant information available.*

**Incompatible materials:** *No further relevant information available.*

**Hazardous decomposition products:** *No dangerous decomposition products known.*

### SECTION 11: Toxicological information

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

**Acute toxicity** *Based on available data, the classification criteria are not met.*

**Skin corrosion or irritation** *Based on available data, the classification criteria are not met.*

**Serious eye damage or irritation** *Based on available data, the classification criteria are not met.*

**Respiratory and skin sensitization** *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.*

**Specific target organ toxicity – single exposure**

*Based on available data, the classification criteria are not met.*

**Specific target organ toxicity – repeated exposure**

*Based on available data, the classification criteria are not met.*

**Aspiration hazards** *Based on available data, the classification criteria are not met.*

**Information on other hazards**

<b>endocrine disrupting potential</b>
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<i>Substance is not listed.</i>
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### SECTION 12: Ecological information

**Toxicity**

**Aquatic toxicity:** *No further relevant information available.*

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

**Bioaccumulative potential** *No further relevant information available.*

**Mobility in soil** *No further relevant information available.*

**Results of PBT and vPvB assessment**

**PBT:** *Not applicable.*

**vPvB:** *Not applicable.*

**Endocrine disrupting properties**

*The product does not contain substances with endocrine disrupting properties.*

(Contd. on page 5)

Trade name: Standard solution SiO2

(Contd. of page 4)

**Other adverse effects****Additional ecological information:****General notes:** *Not hazardous for water.***SECTION 13: Disposal considerations****Waste treatment methods****Recommendation***Small amounts may be diluted with plenty of water and washed away. Dispose of bigger amounts in accordance with Local Authority requirements.**Smaller quantities can be disposed of with household waste.***Uncleaned packaging:****Recommendation:** *Disposal must be made according to official regulations.***Recommended cleansing agents:** *Water, if necessary together with cleansing agents.***SECTION 14: Transport information****UN number****ADN, IMDG, IATA**

Void

**UN proper shipping name****ADR, ADN, IMDG, IATA**

Void

**Transport hazard class(es)****ADR, ADN, IMDG, IATA****Class**

Void

**Packing group****ADR, IMDG, IATA**

Void

**Environmental hazards:****Marine pollutant:**

No

**Special precautions for user***Not applicable.***Transport in bulk according to Annex II of****MARPOL 73/78 and the IBC Code***Not applicable.***Transport/Additional information:***Not dangerous according to the above specifications.***UN "Model Regulation":**

Void

**SECTION 15: Regulatory information****Safety, health and environmental regulations specific for the product in question****GHS label elements** *Void***Hazard pictograms** *Void***Signal word** *Void***Hazard statements** *Void***Directive 2012/18/EU****Named dangerous substances - ANNEX I** *Substance is not listed.***Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.***SECTION 16: Other information***This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.***Department issuing SDS:** *PCC-TWR***Contact:** *MSDS.pcc@endress.com***Abbreviations and acronyms:***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**EINECS: European Inventory of Existing Commercial Chemical Substances*

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# Safety data Sheet

in accordance with SANS

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Version 9 (replaces version 8)

Revision: 19.09.2024

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**Trade name: Standard solution SiO<sub>2</sub>**

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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

\* **Data compared to the previous version altered.**

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