

19.09.2024

Kit Components

Product code	Description
CAY643-VxxAAE	CA71SI Reagent Set for silicate

Components:

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

SECTION 1: Identification of the substance or mixture and of the supplier**1.1 Product identifier****Trade name:** Reagent SI1**Synonym:** *for silicate***Article number:** 51513729**1.2 Relevant identified uses of the substance or mixture and uses advised against***No further relevant information available.***Application of the substance / the mixture** *Laboratory chemicals***1.3 Details of the supplier of the safety data sheet****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***1.4 Emergency telephone number:** 0064 800 764 766*** SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008***health hazard**Specific target organ toxicity - repeated exposure
Category 2**H373 May cause damage to organs through
prolonged or repeated exposure.**corrosion**Skin corrosion Category 1A**H314 Causes severe skin burns and eye damage.**Serious eye damage Category 1**H318 Causes serious eye damage.***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**

GHS05



GHS08

Signal word *Danger***Hazard-determining components of labelling:***sulphuric acid**molybdic acid**sodium hydrogensulphate***Hazard statements***H314 Causes severe skin burns and eye damage.**H373 May cause damage to organs through prolonged or repeated exposure.*

(Contd. on page 2)

— NZ —

Trade name: Reagent SI1

(Contd. of page 1)

Precautionary statements

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 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/Information on ingredients**3.2 Mixtures**

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:		
CAS: 7664-93-9	sulphuric acid	5-10%
EINECS: 231-639-5	 Skin corrosion Category 1A, H314	
CAS: 7681-38-1	sodium hydrogensulphate	2-6%
EINECS: 231-665-7	 Serious eye damage Category 1, H318	
CAS: 7782-91-4	molybdic acid	2-6%
EINECS: 231-970-5	 Specific target organ toxicity - repeated exposure Category 2, H373;  Specific target organ toxicity - single exposure Category 3, H335	

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**

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.

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: Fire fighting measures**5.1 Extinguishing media****Suitable extinguishing agents:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

For safety reasons unsuitable extinguishing agents: no further information

5.2 Special hazards arising from the substance or mixture

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

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Trade name: Reagent SI1

(Contd. of page 2)

5.3 Advice for firefighters No further relevant information available.
Protective equipment: Mount respiratory protective device.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

Mount respiratory protective device.

Wear protective equipment. Keep unprotected persons away.

Wear protective clothing.

6.2 Environmental precautions:

Dilute with plenty of water.

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

6.3 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.

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**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

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

7.2 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

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:

CAS: 7664-93-9 sulphuric acid

WES (New Zealand) Long-term value: 0.1 mg/m³
confirmed carcinogen

IOELV (EU) Long-term value: 0.05 mg/m³

DNELs

CAS: 7664-93-9 sulphuric acid

Inhalative DNEL short-term 0.1 mg/m³ (worker) (local effects)

DNEL long-term 0.05 mg/m³ (worker) (local effects)

PNECs

CAS: 7664-93-9 sulphuric acid

PNEC 8.8 mg/L (Wastewater treatment plant)

0.25 mg/L (sea water)

PNEC 2.5 µg/L (fresh water)

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Trade name: Reagent SI1

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PNEC	2 µg/kg (marine sediment)
	2 µg/kg (freshwater sediment)

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

8.2 Exposure controls

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

Individual protection measures, such as personal protective equipment**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.

Store protective clothing separately.

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.

Eyeface protection

Tightly sealed goggles

Body protection: *Protective work clothing*

SECTION 9: Physical and chemical properties**9.1 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.

Boiling point or initial boiling point and boiling range

>100 °C

Flammability

Not applicable.

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Trade name: Reagent SI1

(Contd. of page 4)

Lower and upper explosion limit

Lower:

Not determined.

Upper:

Not determined.

Flash point:

Not applicable.

Decomposition temperature:

Not determined.

pH at 20 °C

<2

Viscosity:

Kinematic viscosity

Not determined.

Dynamic:

Not determined.

Solubility

water:

Fully miscible.

Partition coefficient n-octanol/water (log value)

Not determined.

Vapour pressure at 20 °C:

23 hPa

Density and/or relative density

Density:

Not determined.

Relative density

Not determined.

Vapour density

Not determined.

Particle characteristics

Not applicable.

9.2 Other information

Appearance:

Form:

Liquid

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

Ignition temperature:

Product is not selfigniting.

Explosive properties:

Product does not present an explosion hazard.

Not determined.

Solvent content:

Water:

81.4 %

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

10.1 Reactivity No further relevant information available.

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Trade name: Reagent SI1

(Contd. of page 5)

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:** *No dangerous decomposition products known.***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:****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/irritation *Causes severe skin burns and eye damage.***Serious eye damage/irritation** *Causes serious eye damage.***STOT-repeated exposure** *May cause damage to organs through prolonged or repeated exposure.***11.2 Information on other hazards****Endocrine disrupting properties***None of the ingredients is listed.***SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:** *No further relevant information available.***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****PBT:** *Not applicable.***vPvB:** *Not applicable.***12.6 Endocrine disrupting properties***The product does not contain substances with endocrine disrupting properties.***12.7 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****13.1 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.*

(Contd. on page 7)

Trade name: Reagent SI1

(Contd. of page 6)

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

14.1 UN number or ID number

IMDG, IATA

UN2796

14.2 UN proper shipping name

NZS

UN2796 SULPHURIC ACID

IMDG

SULPHURIC ACID

IATA

Sulphuric acid

14.3 Transport hazard class(es)

NZS



Class

8 (C1) Corrosive substances.

Label

8

IMDG, IATA



Class

8 Corrosive substances.

Label

8

14.4 Packing group

NZS, IMDG, IATA

II

14.5 Environmental hazards:

Not applicable.

14.6 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

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

Transport/Additional information:

NZS

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

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— NZ —

Trade name: Reagent SI1

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*** SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****New Zealand Inventory of Chemicals**

CAS: 7732-18-5	water
CAS: 7664-93-9	sulphuric acid
CAS: 7681-38-1	sodium hydrogensulphate
CAS: 7782-91-4	molybdic acid

HSNO Approval numbers

None of the ingredients is listed.

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms

GHS05 GHS08

Signal word *Danger***Hazard-determining components of labelling:***sulphuric acid**molybdic acid**sodium hydrogensulphate***Hazard statements***H314 Causes severe skin burns and eye damage.**H373 May cause damage to organs through prolonged or repeated exposure.***Precautionary statements***P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].**P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**P310 Immediately call a POISON CENTER/doctor.**P321 Specific treatment (see on this label).**P405 Store locked up.**P501 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.***15.2 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.***16.1 Relevant phrases***H314 Causes severe skin burns and eye damage.**H318 Causes serious eye damage.**H335 May cause respiratory irritation.**H373 May cause damage to organs through prolonged or repeated exposure.***16.3 Recommended restriction of use****Department issuing SDS:** *PCC-TWR*

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Trade name: Reagent SI1

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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**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)**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 corrosion Category 1A: Skin corrosion/irritation – Category 1A**Serious eye damage Category 1: Serious eye damage/eye irritation – Category 1**Specific target organ toxicity - single exposure Category 3: Specific target organ toxicity (single exposure) – Category 3**Specific target organ toxicity - repeated exposure Category 2: Specific target organ toxicity (repeated exposure) – Category 2**** Data compared to the previous version altered.**

NZ

SECTION 1: Identification of the substance or mixture and of the supplier**1.1 Product identifier****Trade name:** Reagent SI2**Synonym:** *for silicate***Article number:** 51513730**1.2 Relevant identified uses of the substance or mixture and uses advised against***No further relevant information available.***Application of the substance / the mixture** *Laboratory chemicals***1.3 Details of the supplier of the safety data sheet****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***1.4 Emergency telephone number:** 0064 800 764 766**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008***Eye irritation Category 2 H319 Causes serious eye irritation.***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**

GHS07

Signal word *Warning***Hazard statements***H319 Causes serious eye irritation.***Precautionary statements***P264 Wash thoroughly after handling.**P280 Wear eye protection / face protection.**P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**P337+P313 If eye irritation persists: Get medical advice/attention.***2.3 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.*

(Contd. on page 2)

— NZ —

Trade name: Reagent SI2

(Contd. of page 1)

SECTION 3: Composition/Information on ingredients**3.2 Mixtures****Description:** Mixture of substances listed below with nonhazardous additions.**Dangerous components:**

CAS: 77-92-9	citric acid	10-20%
EINECS: 201-069-1	Eye irritation Category 2, H319; Specific target organ toxicity - single exposure Category 3, H335	

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; 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.**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: Fire fighting measures**5.1 Extinguishing media****Suitable extinguishing agents:**CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.**For safety reasons unsuitable extinguishing agents:** no further information**5.2 Special hazards arising from the substance or mixture** No further relevant information available.**5.3 Advice for firefighters** No further relevant information available.**Protective equipment:** No special measures required.**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.**6.2 Environmental precautions:**

Dilute with plenty of water.

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

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

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**7.1 Precautions for safe handling** No special precautions are necessary if used correctly.**Information about fire - and explosion protection:** No special measures required.

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— NZ —

Trade name: Reagent SI2

(Contd. of page 2)

7.2 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**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 section 7.***Individual protection measures, such as personal protective equipment****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.***Eyeface protection***Tightly sealed goggles***Body protection:** *Protective work clothing*

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— NZ —

Trade name: Reagent Si2

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SECTION 9: Physical and chemical properties**9.1 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.
Boiling point or initial boiling point and boiling range	>100 °C
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
Auto-ignition temperature:	1 °C
Decomposition temperature:	Not determined.
pH at 20 °C	<2
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure at 20 °C:	23 hPa
Density and/or relative density	
Density at 20 °C:	1.096 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.
Particle characteristics	Not applicable.

9.2 Other information

Appearance:	
Form:	Liquid
Important information on protection of health and environment, and on safety.	
Ignition temperature:	Product is not selfigniting.
Explosive properties:	Product does not present an explosion hazard. Not determined.
Solvent content:	
Water:	84.3 %
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

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Trade name: Reagent SI2

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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:** No dangerous decomposition products known.**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:****CAS: 77-92-9 citric acid**

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

Serious eye damage/irritation Causes serious eye irritation.**11.2 Information on other hazards****Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information**12.1 Toxicity****Aquatic toxicity:** No further relevant information available.**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****PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

12.7 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.

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Trade name: Reagent SI2

(Contd. of page 5)

SECTION 13: Disposal considerations**13.1 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****14.1 UN number or ID number**

ADN, IMDG, IATA

Void

14.2 UN proper shipping name

NZS, ADN, IMDG, IATA

Void

14.3 Transport hazard class(es)

NZS, ADN, IMDG, IATA

Class

Void

14.4 Packing group

NZS, 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****New Zealand Inventory of Chemicals***All ingredients are listed.***HSNO Approval numbers***None of the ingredients is listed.***Labelling according to Regulation (EC) No 1272/2008***The product is classified and labelled according to the CLP regulation.***Hazard pictograms**

GHS07

Signal word *Warning***Hazard statements***H319 Causes serious eye irritation.***Precautionary statements***P264 Wash thoroughly after handling.**P280 Wear eye protection / face protection.**P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**P337+P313 If eye irritation persists: Get medical advice/attention.***Directive 2012/18/EU****Named dangerous substances - ANNEX I** *None of the ingredients is listed.*

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Trade name: Reagent SI2

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National regulations:**Waterhazard class:** *Water hazard class 1 (Self-assessment): slightly hazardous for water.***15.2 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.

16.1 Relevant phrases*H319 Causes serious eye irritation.**H335 May cause respiratory irritation.***16.3 Recommended restriction of use****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**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**Eye irritation Category 2: Serious eye damage/eye irritation – Category 2**Specific target organ toxicity - single exposure Category 3: Specific target organ toxicity (single exposure) – Category 3**** Data compared to the previous version altered.**

— NZ —

SECTION 1: Identification of the substance or mixture and of the supplier**1.1 Product identifier**Trade name: **Reagent SI3**Synonym: *for silicate*

Article number: 71256073

1.2 Relevant identified uses of the substance or mixture and uses advised against*No further relevant information available.*Application of the substance / the mixture *Laboratory chemicals***1.3 Details of the supplier of the safety data sheet**

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

1.4 Emergency telephone number: 0064 800 764 766*** SECTION 2: Hazards identification****2.1 Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008

*health hazard*Specific target organ toxicity - repeated exposure
Category 2H373 May cause damage to organs through
prolonged or repeated exposure.*corrosion*

Serious eye damage Category 1

H318 Causes serious eye damage.



Skin sensitisation Category 1

H317 May cause an allergic skin reaction.

Hazardous to the aquatic environment chronic
Category 3H412 Harmful to aquatic life with long lasting
effects.**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



GHS05



GHS07



GHS08

Signal word *Danger*

Hazard-determining components of labelling:

*disodium disulphite**bis(4-hydroxy-N-methylanilinium) sulfate*

Trade name: Reagent SI3

(Contd. of page 1)

Hazard statements*H318 Causes serious eye damage.**H317 May cause an allergic skin reaction.**H373 May cause damage to organs through prolonged or repeated exposure.**H412 Harmful to aquatic life with long lasting effects.***Precautionary statements***P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**P310 Immediately call a POISON CENTER/doctor.**P321 Specific treatment (see on this label).**P362+P364 Take off contaminated clothing and wash it before reuse.**P501 Dispose of contents/container in accordance with local/regional/national/international regulations.***2.3 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/Information on ingredients****3.2 Mixtures***Description: Mixture of substances listed below with nonhazardous additions.***Dangerous components:**

CAS: 7681-57-4 EINECS: 231-673-0	disodium disulphite ⚠️ Serious eye damage Category 1, H318; ⚠️ Acute oral toxicity Category 4, H302	10-20%
CAS: 55-55-0 EINECS: 200-237-1	bis(4-hydroxy-N-methylanilinium) sulfate ⚠️ Specific target organ toxicity - repeated exposure Category 2, H373; ⚠️ Hazardous to the aquatic environment acute Category 1, H400; ⚠️ Hazardous to the aquatic environment chronic Category 1, H410; ⚠️ Acute oral toxicity Category 4, H302; Skin sensitisation Category 1, H317	1-2.5%

*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***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.***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.*

(Contd. on page 3)

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Trade name: Reagent SI3

(Contd. of page 2)

*** SECTION 5: Fire fighting measures****5.1 Extinguishing media****Suitable extinguishing agents:***CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.***For safety reasons unsuitable extinguishing agents:** *no further information***5.2 Special hazards arising from the substance or mixture***During heating or in case of fire poisonous gases are produced.***5.3 Advice for firefighters** *No further relevant information available.***Protective equipment:** *Mount respiratory protective device.***SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures***Mount respiratory protective device.**Wear protective equipment. Keep unprotected persons away.**Wear protective clothing.***6.2 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.***6.3 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.***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***Ensure good ventilation/exhaustion at the workplace.**Prevent formation of aerosols.***Information about fire - and explosion protection:** *Keep respiratory protective device available.***7.2 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***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:****CAS: 7681-57-4 disodium disulphite**

WES (New Zealand)	Long-term value: 5 mg/m ³ dsen, rsen
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Additional information: *The lists valid during the making were used as basis.*

(Contd. on page 4)

Trade name: Reagent SI3

(Contd. of page 3)

8.2 Exposure controls**Appropriate engineering controls** *No further data; see section 7.***Individual protection measures, such as personal protective equipment****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.**Store protective clothing separately.**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**Natural rubber, NR**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.***Eyeface protection***Tightly sealed goggles***Body protection:** *Protective work clothing***SECTION 9: Physical and chemical properties****9.1 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.***Boiling point or initial boiling point and boiling range***100 °C***Flammability***Not applicable.***Lower and upper explosion limit****Lower:***Not determined.***Upper:***Not determined.*

(Contd. on page 5)

Trade name: Reagent SI3

(Contd. of page 4)

Flash point:	Not applicable.
Decomposition temperature:	Not determined.
pH	Slightly acidic
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic:	Not determined.
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure at 20 °C:	23 hPa
Density and/or relative density	
Density at 20 °C:	1.029 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.
Particle characteristics	Not applicable.

9.2 Other information

Appearance:

Form: Fluid

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

Ignition temperature: Product is not selfigniting.

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

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.

(Contd. on page 6)

Trade name: Reagent SI3

(Contd. of page 5)

10.5 Incompatible materials: No further relevant information available.**10.6 Hazardous decomposition products:** No dangerous decomposition products known.**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.**Serious eye damage/irritation** Causes serious eye damage.**Respiratory or skin sensitisation** May cause an allergic skin reaction.**STOT-repeated exposure** May cause damage to organs through prolonged or repeated exposure.**11.2 Information on other hazards****Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information**12.1 Toxicity****Aquatic toxicity:** No further relevant information available.**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****PBT:** Not applicable.**vPvB:** Not applicable.**12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

12.7 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**13.1 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****14.1 UN number or ID number**

ADN, IMDG, IATA

Void

14.2 UN proper shipping name

NZS, ADN, IMDG, IATA

Void

14.3 Transport hazard class(es)

NZS, ADN, IMDG, IATA

Class

Void

14.4 Packing group

NZS, IMDG, IATA

Void

(Contd. on page 7)

Trade name: Reagent SI3

(Contd. of page 6)

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

New Zealand Inventory of Chemicals

All ingredients are listed.

HSNO Approval numbers

CAS: 7681-57-4 | disodium disulphite

HSR001548

Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

Hazard pictograms



GHS05 GHS07 GHS08

Signal word *Danger*

Hazard-determining components of labelling:

disodium disulphite

bis(4-hydroxy-N-methylanilinium) sulfate

Hazard statements

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.

P501 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.

15.2 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.

16.1 Relevant phrases

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

(Contd. on page 8)

— NZ —

Trade name: Reagent SI3

(Contd. of page 7)

*H410 Very toxic to aquatic life with long lasting effects.***16.3 Recommended restriction of use****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**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)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Acute oral toxicity Category 4: Acute toxicity – Category 4**Serious eye damage Category 1: Serious eye damage/eye irritation – Category 1**Skin sensitisation Category 1: Skin sensitisation – Category 1**Specific target organ toxicity - repeated exposure Category 2: Specific target organ toxicity (repeated exposure) – Category 2**Hazardous to the aquatic environment acute Category 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1**Hazardous to the aquatic environment chronic Category 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1**Hazardous to the aquatic environment chronic Category 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3**** Data compared to the previous version altered.**

— NZ —

SECTION 1: Identification of the substance or mixture and of the supplier**1.1 Product identifier****Trade name:****Standard solution SiO₂****0 µg/l****Synonym:** 0 µg/L**CAS Number:**

7732-18-5

EC number:

231-791-2

1.2 Relevant identified uses of the substance or mixture and uses advised against*No further relevant information available.***Application of the substance / the mixture** *Laboratory chemicals***1.3 Details of the supplier of the safety data sheet****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***1.4 Emergency telephone number:** 0064 800 764 766*** SECTION 2: Hazards identification****2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008***The substance 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***2.3 Other hazards****Results of PBT and vPvB assessment****PBT:** *Not applicable.***vPvB:** *Not applicable.***SECTION 3: Composition/Information on ingredients****3.1 Substances****CAS No. Description***CAS: 7732-18-5 water***Identification number(s)****EC number:** 231-791-2**SECTION 4: First aid measures****4.1 Description of 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.*

(Contd. on page 2)

—NZ—

Trade name: Standard solution SiO₂

(Contd. of page 1)

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

After swallowing: *If symptoms persist consult doctor.*

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: Fire fighting measures**5.1 Extinguishing media**

Suitable extinguishing agents: *Use fire extinguishing methods suitable to surrounding conditions.*

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

5.2 Special hazards arising from the substance or mixture *No further relevant information available.***5.3 Advice for firefighters** *No further relevant information available.*

Protective equipment: *No special measures required.*

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures** *Wear protective clothing.***6.2 Environmental precautions:** *Dilute with plenty of water.***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.

See Section 13 for disposal information.

SECTION 7: Handling and storage**7.1 Precautions for safe handling** *No special measures required.*

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

7.2 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*

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: *Not required.*

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

8.2 Exposure controls

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

Individual protection measures, such as personal protective equipment

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.*

(Contd. on page 3)

Trade name: Standard solution SiO₂

(Contd. of page 2)

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.

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.

Eyeface protection Not required.

Body protection: Protective work clothing

* **SECTION 9: Physical and chemical properties****9.1 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
Boiling point or initial boiling point and boiling range	100 °C
Flammability	Not applicable.
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not applicable.
pH	Not determined.
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic at 20 °C:	0.952 mPas
Solubility	
water:	Fully miscible.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure at 20 °C:	23 hPa
Density and/or relative density	
Density at 20 °C:	1 g/cm ³
Relative density	Not determined.
Vapour density	Not determined.
Particle characteristics	Not applicable.

9.2 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

(Contd. on page 4)

Trade name: Standard solution SiO₂

(Contd. of page 3)

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:** *No dangerous decomposition products known.***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.***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***Substance is not listed.***SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:** *No further relevant information available.***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****PBT:** *Not applicable.***vPvB:** *Not applicable.***12.6 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)

12.7 Other adverse effects**Additional ecological information:****General notes:** *Not hazardous for water.***SECTION 13: Disposal considerations****13.1 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****14.1 UN number or ID number****ADN, IMDG, IATA**

Void

14.2 UN proper shipping name**NZS, ADN, IMDG, IATA**

Void

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

Void

14.4 Packing group**NZS, IMDG, IATA**

Void

14.5 Environmental hazards:**Marine pollutant:**

No

14.6 Special precautions for user

Not applicable.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

Transport/Additional information:

Not dangerous according to the above specifications.

UN "Model Regulation":

Void

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****New Zealand Inventory of Chemicals***Substance is listed.***HSNO Approval numbers***Substance is not listed.***Labelling according to Regulation (EC) No 1272/2008** Void**Hazard pictograms** Void**Signal word** Void**Hazard statements** Void**Directive 2012/18/EU****Named dangerous substances - ANNEX I** *Substance is not listed.***15.2 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.*

(Contd. on page 6)

Trade name: Standard solution SiO₂

(Contd. of page 5)

16.3 Recommended restriction of use**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**GHS: Globally Harmonised System of Classification and Labelling of Chemicals**EINECS: European Inventory of Existing Commercial Chemical Substances**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.**

— NZ —