

17.07.2023

Kit Components

| Product code | Description |
|----------------------|--|
| CAY640-VxxAAH | CA70SI Reagent Set for silicate |

Components:

| | |
|------------|---------------------------------------|
| 51508826 | Reagent SI1 for silicate |
| 51508827 | Reagent SI2 for silicate |
| 51509864_1 | Reagent SI3, Component 1 for silicate |
| 51509864_2 | Reagent SI3, Component 2 for silicate |

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:** 51508826**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**STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.**corrosion**Eye Dam. 1 H318 Causes serious eye damage.**Skin Irrit. 2 H315 Causes skin irritation.***Classification according to Directive 67/548/EEC or Directive 1999/45/EC***C; Corrosive**R34: Causes burns.**Xn; Harmful**R20/21/22: Harmful by inhalation, in contact with skin and if swallowed.***Information concerning particular hazards for human and environment:***The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.***Classification system:***The classification is according to the latest editions of the EU-lists, and extended by company and literature data.*

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Trade name: Reagent S11

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2.2 Label elements

Labelling according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

Code letter and hazard designation of product:



C Corrosive

Hazard-determining components of labelling:

*molybdic acid
Sodium hydrogensulfate monohydrate
sulphuric acid*

Risk phrases:

*20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
34 Causes burns.*

Safety phrases:

*9 Keep container in a well-ventilated place.
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
60 This material and its container must be disposed of as hazardous waste.*

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: 10034-88-5 EINECS: 231-665-7 | Sodium hydrogensulfate monohydrate C R34; Xi R37 Eye Dam. 1, H318 | 5-10% |
| CAS: 7664-93-9 EINECS: 231-639-5 | sulphuric acid C R35 Skin Corr. 1A, H314 | 2-6% |
| CAS: 7782-91-4 EINECS: 231-970-5 | molybdic acid T R23/24/25 STOT RE 2, H373; 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

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.

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Trade name: Reagent S11

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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.

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:

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.*

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Trade name: Reagent S11

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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/m ³ confirmed carcinogen |
| IOELV (EU) | Long-term value: 0.05 mg/m ³ |
| DNELs | |
| CAS: 7664-93-9 sulphuric acid | |
| Inhalative | DNEL short-term 0.1 mg/m ³ (worker) (local effects) |
| | DNEL long-term 0.05 mg/m ³ (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) |
| 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 skin.
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.

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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/face 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. |
| Flash point: | Not applicable. |
| Decomposition temperature: | Not determined. |
| pH | Acidic |
| Viscosity: | |
| Kinematic viscosity | Not determined. |
| Kinematic viscosity | |
| Dynamic: | Not determined. |
| Solubility | |
| water: | Fully miscible. |
| Partition coefficient n-octanol/water (log value) | Not determined. |
| Vapour pressure at 20 °C: | 23 hPa |
| Vapour pressure: | |
| Density and/or relative density | |
| Density: | Not determined. |
| Relative density | Not determined. |
| Vapour density | Not determined. |

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: >80.0 %

Solids content: 0.0 %

Change in condition

Evaporation rate: Not determined.

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Trade name: Reagent S11

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Information with regard to physical hazard

classes

| | |
|---|------|
| Explosives | Void |
| Flammable gases | Void |
| Aerosols | Void |
| Oxidising gases | Void |
| Gases under pressure | Void |
| Flammable liquids | Void |
| Flammable solids | Void |
| Self-reactive substances and mixtures | Void |
| Pyrophoric liquids | Void |
| Pyrophoric solids | Void |
| Self-heating substances and mixtures | Void |
| Substances and mixtures, which emit flammable gases in contact with water | Void |
| Oxidising liquids | Void |
| Oxidising solids | Void |
| Organic peroxides | Void |
| Corrosive to metals | Void |
| Desensitised explosives | Void |

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: 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: 7782-91-4 molybdic acid

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

Skin corrosion/irritation Causes skin irritation.

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.

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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.

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

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.

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Trade name: Reagent S11

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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

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.***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.**R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.**R34 Causes burns.**R35 Causes severe burns.**R37 Irritating to respiratory system.***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)**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*

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*Skin Corr. 1A: Skin corrosion/irritation – Category 1A**Skin Irrit. 2: Skin corrosion/irritation – Category 2**Eye Dam. 1: Serious eye damage/eye irritation – Category 1**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.**


—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:** 51508827**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 Irrit. 2 H319 Causes serious eye irritation.***Classification according to Directive 67/548/EEC or Directive 1999/45/EC** *Not applicable.***Information concerning particular hazards for human and environment:***The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.***Classification system:***The classification is according to the latest editions of the EU-lists, and extended by company and literature data.***2.2 Label elements****Labelling according to EU guidelines:***Observe the general safety regulations when handling chemicals.**The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.***Safety phrases:***29 Do not empty into drains.***Special labelling of certain preparations:***Safety data sheet available for professional user on request.***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.*

Trade name: Reagent SI2

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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 |  Xi R36 | 10-20% |
| EINECS: 201-069-1 | |  Eye Irrit. 2, H319; STOT SE 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.**7.2 Conditions for safe storage, including any incompatibilities****Storage:****Requirements to be met by storerooms and receptacles:** No special requirements.

(Contd. on page 3)

Trade name: Reagent SI2

(Contd. of page 2)

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.***Eye/face 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:***Odourless***Odour threshold:***Not determined.*

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Trade name: Reagent SI2

(Contd. of page 3)

| | |
|---|-------------------------------|
| Melting point/freezing point: | <i>Undetermined.</i> |
| Boiling point or initial boiling point and boiling range | <i>100 °C</i> |
| Flammability | <i>Not applicable.</i> |
| Lower and upper explosion limit | |
| Lower: | <i>Not determined.</i> |
| Upper: | <i>Not determined.</i> |
| Flash point: | <i>Not applicable.</i> |
| Auto-ignition temperature: | <i>1 °C</i> |
| Decomposition temperature: | <i>Not determined.</i> |
| pH | <i>Slightly acidic</i> |
| Viscosity: | |
| Kinematic viscosity | <i>Not determined.</i> |
| Kinematic viscosity | |
| Dynamic: | <i>Not determined.</i> |
| Solubility | |
| water: | <i>Fully miscible.</i> |
| Partition coefficient n-octanol/water (log value) | <i>Not determined.</i> |
| Vapour pressure at 20 °C: | <i>23 hPa</i> |
| Vapour pressure: | |
| Density and/or relative density | |
| Density at 20 °C: | <i>1.081 g/cm³</i> |
| Relative density | <i>Not determined.</i> |
| Vapour density | <i>Not determined.</i> |

9.2 Other information

| | |
|--|--|
| Appearance: | |
| Form: | <i>Fluid</i> |
| Important information on protection of health and environment, and on safety. | |
| Ignition temperature: | <i>Product is not selfigniting.</i> |
| Explosive properties: | <i>Product does not present an explosion hazard. Not determined.</i> |
| Solvent content: | |
| Water: | <i>>80.0 %</i> |
| Solids content: | <i>0.0 %</i> |
| Change in condition | |
| Evaporation rate | <i>Not determined.</i> |

Information with regard to physical hazard classes

| | |
|--|-------------|
| 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> |

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Trade name: Reagent SI2

Desensitised explosives

Void

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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.

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.

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Trade name: Reagent SI2

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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 | Void |
| 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.***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***H319 Causes serious eye irritation.**H335 May cause respiratory irritation.**R36 Irritating to eyes.***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 Irrit. 2: Serious eye damage/eye irritation – Category 2**STOT SE 3: Specific target organ toxicity (single exposure) – Category 3**** Data compared to the previous version altered.**



SECTION 1: Identification of the substance or mixture and of the supplier**1.1 Product identifier****Trade name:** Reagent SI3, Component 1**Synonym:** *for silicate***Article number:** 51509864_1**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 product is not classified, according to the CLP regulation.***Classification according to Directive 67/548/EEC or Directive 1999/45/EC** *Not applicable.***Information concerning particular hazards for human and environment:***The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.***Classification system:***The classification is according to the latest editions of the EU-lists, and extended by company and literature data.***2.2 Label elements****Labelling according to EU guidelines:***Observe the general safety regulations when handling chemicals.**The product is not subject to identification regulations under EU Directives and the Ordinance on Hazardous Materials (German GefStoffV).***Safety phrases:***29 Do not empty into drains.***Special labelling of certain preparations:***Safety data sheet available for professional user on request.***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.*

(Contd. on page 2)

— NZ —

Trade name: Reagent SI3, Component 1

(Contd. of page 1)

| Dangerous components: | | |
|--|---|-------|
| CAS: 124-68-5 | 2-amino-2-methylpropanol | 5-10% |
| EINECS: 204-709-8 |  Xi R36/38 | |
| | R52/53 | |
|  Skin Irrit. 2, H315; Eye Irrit. 2, H319; Aquatic Chronic 3, H412 | | |

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: 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.

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 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.

(Contd. on page 3)

Trade name: Reagent SI3, Component 1

(Contd. of page 2)

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:***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. 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** *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 | <i>Fluid</i> |
| Colour: | <i>Colourless</i> |
| Odour: | <i>Characteristic</i> |
| Odour threshold: | <i>Not determined.</i> |
| Melting point/freezing point: | <i>Undetermined.</i> |
| Boiling point or initial boiling point and boiling range | <i>100 °C</i> |
| Flammability | <i>Not applicable.</i> |
| Lower and upper explosion limit | |
| Lower: | <i>Not determined.</i> |
| Upper: | <i>Not determined.</i> |
| Flash point: | <i>Not applicable.</i> |
| Decomposition temperature: | <i>Not determined.</i> |
| pH | <i>Alkaline</i> |
| Viscosity: | |
| Kinematic viscosity | <i>Not determined.</i> |
| Kinematic viscosity | |
| Dynamic: | <i>Not determined.</i> |
| Solubility | |
| water: | <i>Fully miscible.</i> |
| Partition coefficient n-octanol/water (log value) | <i>Not determined.</i> |
| Vapour pressure at 20 °C: | <i>23 hPa</i> |

(Contd. on page 4)

Trade name: Reagent SI3, Component 1

(Contd. of page 3)

Vapour pressure:

Density and/or relative density

Density at 20 °C:

0.996 g/cm³

Relative density

Not determined.

Vapour density

Not determined.

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:

Organic solvents:

7.5 %

Water:

92.5 %

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.*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.*

(Contd. on page 5)

Trade name: Reagent SI3, Component 1

(Contd. of page 4)

Respiratory or skin sensitisation *Based on available data, the classification criteria are not met.***Germ cell mutagenicity** *Based on available data, the classification criteria are not met.***Carcinogenicity** *Based on available data, the classification criteria are not met.***Reproductive toxicity** *Based on available data, the classification criteria are not met.***STOT-single exposure** *Based on available data, the classification criteria are not met.***STOT-repeated exposure** *Based on available data, the classification criteria are not met.***Aspiration hazard** *Based on available data, the classification criteria are not met.***11.2 Information on other hazards****Endocrine disrupting properties***None of the ingredients is listed.***SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity:** *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.**** SECTION 13: Disposal considerations****13.1 Waste treatment methods****Recommendation** *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.*

(Contd. on page 6)

Trade name: Reagent SI3, Component 1

UN "Model Regulation":

Void

(Contd. of page 5)

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.***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***H315 Causes skin irritation.**H319 Causes serious eye irritation.**H412 Harmful to aquatic life with long lasting effects.**R36/38 Irritating to eyes and skin.**R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.***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**Skin Irrit. 2: Skin corrosion/irritation – Category 2**Eye Irrit. 2: Serious eye damage/eye irritation – Category 2**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**1.1 Product identifier****Trade name:** Reagent SI3, Component 2**Synonym:** *for silicate***Article number:** 51509864_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***corrosion**Eye Dam. 1 H318 Causes serious eye damage.**Acute Tox. 4 H302 Harmful if swallowed.***Classification according to Directive 67/548/EEC or Directive 1999/45/EC***Xn; Harmful**R22: Harmful if swallowed.**Xi; Irritant**R41: Risk of serious damage to eyes.**R31: Contact with acids liberates toxic gas.***Information concerning particular hazards for human and environment:***The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.***Classification system:***The classification is according to the latest editions of the EU-lists, and extended by company and literature data.***2.2 Label elements****Labelling according to EU guidelines:***The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.*

(Contd. on page 2)

— NZ —

Trade name: Reagent SI3, Component 2

(Contd. of page 1)

Code letter and hazard designation of product:



Xn Harmful

Hazard-determining components of labelling:

disodium disulphite

Risk phrases:

- 22 Harmful if swallowed.
- 31 Contact with acids liberates toxic gas.
- 41 Risk of serious damage to eyes.

Safety phrases:

- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 29 Do not empty into drains.
- 36/39 Wear suitable protective clothing and eye/face protection.
- 60 This material and its container must be disposed of as hazardous waste.

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 | | 80-100% |
|-------------------------------------|---------------------|------|---------|

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:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

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. Then consult a doctor.

After swallowing: 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.

(Contd. on page 3)

Trade name: Reagent SI3, Component 2

(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 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 equipment. Keep unprotected persons away.

Wear protective clothing.

6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Use neutralising agent.

Dispose contaminated material as waste according to section 13.

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 Thorough dedusting.

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: Keep container tightly sealed.

Storage class: 11

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 d _{sen} , r _{sen} |
|-------------------|---|

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.

(Contd. on page 4)

Trade name: Reagent SI3, Component 2

(Contd. of page 3)

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***SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information**

| | |
|---|------------------------|
| Physical state | <i>Solid</i> |
| Colour: | <i>White</i> |
| Odour: | <i>Characteristic</i> |
| Odour threshold: | <i>Not determined.</i> |
| Melting point/freezing point: | <i>Undetermined.</i> |
| Boiling point or initial boiling point and boiling range | <i>Undetermined.</i> |
| Flammability | <i>Not determined.</i> |
| Lower and upper explosion limit | |
| Lower: | <i>Not determined.</i> |
| Upper: | <i>Not determined.</i> |
| Flash point: | <i>Not applicable.</i> |
| Decomposition temperature: | <i>Not determined.</i> |
| pH | <i>Not applicable.</i> |
| Viscosity: | |
| Kinematic viscosity | <i>Not applicable.</i> |
| Kinematic viscosity | |
| Dynamic: | <i>Not applicable.</i> |
| Solubility | |
| water: | <i>Soluble.</i> |
| Partition coefficient n-octanol/water (log value) | <i>Not determined.</i> |
| Vapour pressure: | <i>Not applicable.</i> |
| Vapour pressure: | |
| Density and/or relative density | |
| Density: | <i>Not determined.</i> |
| Relative density | <i>Not determined.</i> |

(Contd. on page 5)

Trade name: Reagent SI3, Component 2

(Contd. of page 4)

| | |
|--|--|
| Vapour density | Not applicable. |
| 9.2 Other information | |
| Appearance: | |
| Form: | Crystalline powder |
| 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: | |
| Solids content: | 100.0 % |
| Change in condition | |
| Evaporation rate | Not applicable. |
| Information with regard to physical hazard classes | |
| Explosives | Void |
| Flammable gases | Void |
| Aerosols | Void |
| Oxidising gases | Void |
| Gases under pressure | Void |
| Flammable liquids | Void |
| Flammable solids | Void |
| Self-reactive substances and mixtures | Void |
| Pyrophoric liquids | Void |
| Pyrophoric solids | Void |
| Self-heating substances and mixtures | Void |
| Substances and mixtures, which emit flammable gases in contact with water | Void |
| Oxidising liquids | Void |
| Oxidising solids | Void |
| Organic peroxides | Void |
| Corrosive to metals | Void |
| Desensitised explosives | Void |

SECTION 10: Stability and reactivity

10.1 Reactivity No further relevant information available.

10.2 Chemical stability

Thermal decomposition / conditions to be avoided:

No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid No further relevant information available.

10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition products: 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 Harmful if swallowed.

Serious eye damage/irritation Causes serious eye damage.

11.2 Information on other hazards**Endocrine disrupting properties**

None of the ingredients is listed.

(Contd. on page 6)

Trade name: Reagent SI3, Component 2

(Contd. of page 5)

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.

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

CAS: 7681-57-4 | disodium disulphite

HSR001548

(Contd. on page 7)

Trade name: Reagent SI3, Component 2

(Contd. of page 6)

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*H302 Harmful if swallowed.**H318 Causes serious eye damage.**R22 Harmful if swallowed.**R31 Contact with acids liberates toxic gas.**R41 Risk of serious damage to eyes.***16.3 Recommended restriction of use****Department issuing SDS:** *PCC-TWR***Contact:** *MSDS.pcc@endress.com***Abbreviations and acronyms:***RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)**ICAO: International Civil Aviation Organisation**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 Tox. 4: Acute toxicity – Category 4**Eye Dam. 1: Serious eye damage/eye irritation – Category 1**** Data compared to the previous version altered.**