

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**sera Fe Test, Reagenz 1**

Revision date: 06.09.2023

Product code: Fe-R1

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

sera Fe Test, Reagenz 1

**EAN**

4001942040020

4001942040037

4001942046107

4001942077156

CAS No: 50-81-7

EC No: 200-066-2

**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture**

Solid for monitoring water parameters in aquarium and tap water.

The product is intended for consumer use.

The product is intended for professional use.

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

Company name: sera Werke Heimtierbedarf

J. Ravnak GmbH &amp; Co. KG

Street: Borsigstraße 49

Place: D-52525 Heinsberg

Post-office box: 1466

D-52518 Heinsberg

Telephone: +49 (0)2452 91260

Telefax: +49 (0)2452 5922

e-mail: info@sera.de

Contact person: Dr. Matthias Dahm

e-mail: sds.info@sera.biz

Internet: www.sera.de

Responsible Department: Labor

**1.4. Emergency telephone** +49 (0)2452 91260 (Only available during office hours.)**number:** +49 (0)2452 9126555**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**

This substance is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

Voluntary safety information following the Safety Data Sheet format according to Regulation (EC) No. 1907/2006 (REACH).

**2.2. Label elements****Additional advice on labelling**

According to EC directives or the corresponding national regulations the product does not have to be labelled.

**2.3. Other hazards**

No information available.

**SECTION 3: Composition/information on ingredients****3.1. Substances****Chemical characterization**

Substance, organic (Acid)

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Sum formula: C<sub>6</sub>H<sub>8</sub>O<sub>6</sub>

Molecular weight: 176,12

**Hazardous components**

none (according to Regulation (EC) No 1907/2006 (REACH))

**SECTION 4: First aid measures****4.1. Description of first aid measures****General information**

Take off contaminated clothing. Brush off contaminated clothing.

**After inhalation**

Provide fresh air. If symptoms persist, call a physician.

**After contact with skin**

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

**After contact with eyes**

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

**After ingestion**

Rinse mouth immediately and drink plenty of water.

**4.2. Most important symptoms and effects, both acute and delayed**

The product causes irritation of eyes, skin and mucous membranes. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

**4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

**Unsuitable extinguishing media**

Full water jet

**5.2. Special hazards arising from the substance or mixture**Non-flammable. In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO<sub>2</sub>).**5.3. Advice for firefighters**

Wear a self-contained breathing apparatus and chemical protective clothing.

**Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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

Do not breathe dust. Avoid contact with skin, eyes and clothes.

**For non-emergency personnel**

First aider: Pay attention to self-protection! Remove persons to safety.

**For emergency responders**

Use personal protection equipment.

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**6.2. Environmental precautions**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

**6.3. Methods and material for containment and cleaning up****For containment**

Take up mechanically, placing in appropriate containers for disposal.

**For cleaning up**

Large amounts of spillages: Use approved industrial vacuum cleaner for removal.

Small amounts of spillages: Take up mechanically.

Clear contaminated areas thoroughly. Clean contaminated articles and floor according to the environmental legislation.

**Other information**

Treat the recovered material as prescribed in the section on waste disposal.

**6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

Keep out of reach of children. Avoid dust formation. Do not breathe dust.

**Advice on protection against fire and explosion**

No special fire protection measures are necessary.

**Advice on general occupational hygiene**

Take off contaminated clothing. Keep away from food, drink and animal feedingstuffs. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work.

**Further information on handling**

Handle and open container with care. Put lids on containers immediately after use.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep container tightly closed. Keep container dry. Keep/Store only in original container. Moisture-sensitive.

Keep the packing dry and well sealed to prevent contamination and absorption of humidity. Protect from direct sunlight.

Recommended storage temperature: at room temperature.

**Hints on joint storage**

No materials to be specially mentioned

**Further information on storage conditions**

No special measures are necessary. The product is stable under storage at normal ambient temperatures.

**7.3. Specific end use(s)**

Solid for monitoring water parameters in aquarium and tap water.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Additional advice on limit values**

To date, no national critical limit values exist.

When using do not eat, drink, smoke, sniff.

**8.2. Exposure controls**

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**Appropriate engineering controls**

No special technical protective measures are necessary.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Avoid contact with eyes. Suitable eye protection: Dust protection eye glasses

Not required because of small size of the container

**Hand protection**

Hand protection is not required.

**Skin protection**

Body protection: not required.

**Respiratory protection**

Usually no personal respirative protection necessary. In case of inadequate ventilation wear respiratory protection. In the case of dust or aerosol formation use respirator with filter model P2 (according to DIN 3181, 1980).

**Thermal hazards**

Non-flammable. Thermal decomposition can lead to the escape of irritating gases and vapours. In case of fire may be liberated: Carbon monoxide, Carbon dioxide (CO<sub>2</sub>)

**Environmental exposure controls**

Avoid release to the environment.

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

Physical state:	solid
Colour:	white, crystalline
Odour:	odourless
Odour threshold:	not determined
Melting point/freezing point:	191 °C
Boiling point or initial boiling point and boiling range:	> 191 °C
Flammability:	This material is combustible, but will not ignite readily.
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	not applicable
Auto-ignition temperature:	380 °C
Decomposition temperature:	not determined
pH-Value (at 20 °C):	2,1-2,6 (50 g/l)
Viscosity / kinematic:	not applicable
Water solubility:	330 g/L
Solubility in other solvents	not determined
Partition coefficient n-octanol/water:	-1,85
Vapour pressure:	not determined
Density (at 20 °C):	1,65 g/cm <sup>3</sup>
Bulk density:	not determined
Relative vapour density:	not determined

**9.2. Other information****Information with regard to physical hazard classes****Explosive properties**

The product is not: Explosive. Dust can form an explosive mixture with air.

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Sustaining combustion:	Not sustaining combustion
Self-ignition temperature	
Solid:	not determined
Gas:	not applicable
Oxidizing properties	
Not oxidising.	

**Other safety characteristics**

Evaporation rate:	not determined
Solvent separation test:	No data available
Solvent content:	0 %
Solid content:	100,00 %
Sublimation point:	No data available
Softening point:	not applicable
Pour point:	not applicable
Viscosity / dynamic:	not applicable
Flow time:	not applicable

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

**10.2. Chemical stability**

The product is chemically stable under recommended conditions of storage, use and temperature.

**10.3. Possibility of hazardous reactions**

No known hazardous reactions.

**10.4. Conditions to avoid**

Protect from direct sunlight. Moisture-sensitive.

**10.5. Incompatible materials**

Oxidising agent, Air, humid, Light metals

**10.6. Hazardous decomposition products**

Carbon monoxide, Carbon dioxide (CO<sub>2</sub>).

Thermal decomposition can lead to the escape of irritating gases and vapours.

**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.

**Irritation and corrosivity**

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

Causes skin and eye irritation. Inhalation of dust may cause irritation of the respiratory system.

**Sensitising effects**

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

**Carcinogenic/mutagenic/toxic effects for reproduction**

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

Did not show carcinogenic effects in animal experiments.

**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.

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**Aspiration hazard**

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

**Information on likely routes of exposure**

Skin contact, Eye contact, Ingestion, Inhalation

**Specific effects in experiment on an animal**

No data available.

**Additional information on tests**

The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

**Practical experience**

No data available.

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

No data available.

**Other information**

No data available.

**Further information**

Handle in accordance with good industrial hygiene and safety practice.

Health injuries are not known or expected under normal use.

**SECTION 12: Ecological information****12.1. Toxicity**

On the basis of existing data about the elimination/degradation and bioaccumulation potential longer term damage to the environment is unlikely. Harmless to aquatic organisms up to the tested concentration.

According to the results of tests of biodegradability this product is considered as being readily biodegradable.

**12.2. Persistence and degradability**

Readily biodegradable (according to OECD criteria).

**12.3. Bioaccumulative potential**

No indication of bioaccumulation potential.

**12.4. Mobility in soil**

The product has not been tested.

**12.5. Results of PBT and vPvB assessment**

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

**12.6. Endocrine disrupting properties**

This substance does not have endocrine disrupting properties with respect to non-target organisms.

**12.7. Other adverse effects**

No information available.

**Further information**

Avoid release to the environment. Ecological injuries are not known or expected under normal use.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

**List of Wastes Code - residues/unused products**

160306 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes other than those mentioned in 16 03 05

**List of Wastes Code - used product**

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160509 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08

### List of Wastes Code - contaminated packaging

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

### Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

## SECTION 14: Transport information

### Land transport (ADR/RID)

**14.1. UN number or ID number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

### Inland waterways transport (ADN)

**14.1. UN number or ID number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

### Marine transport (IMDG)

**14.1. UN number or ID number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

### Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number or ID number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

### 14.6. Special precautions for user

No information available.

### 14.7. Maritime transport in bulk according to IMO instruments

not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulatory information

2004/42/EC (VOC): 100 % (1650 g/l)  
Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

#### Additional information

The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

#### National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

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**15.2. Chemical safety assessment**

For this substance a chemical safety assessment has not been carried out.

**SECTION 16: Other information****Changes**

This data sheet contains changes from the previous version in section(s): 2.

**Abbreviations and acronyms**

ADR: Accord européen sur le transport 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 Harmonized 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

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

**Key literature references and sources for data**

Safety Data Sheet, ECHA

**Further Information**

Classification according to Regulation (EC) No 1272/2008 [CLP].

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

sera Fe Test, Reagenz 2

**EAN**

4001942040020

4001942040037

4001942046107

4001942077156

UFI:

M69F-DVDE-YKQP-X2CH

**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture**

Solution for monitoring water parameters in aquarium and tap water.

The product is intended for consumer use.

The product is intended for professional use.

**1.3. Details of the supplier of the safety data sheet**Company name: sera Werke Heimtierbedarf  
J. Ravnak GmbH & Co. KG

Street: Borsigstraße 49

Place: D-52525 Heinsberg

Post-office box: 1466

D-52518 Heinsberg

Telephone: +49 (0)2452 91260

Telefax: +49 (0)2452 5922

e-mail: info@sera.de

Contact person: Dr. Matthias Dahm

e-mail: sds.info@sera.biz

Internet: www.sera.de

Responsible Department: Labor

**1.4. Emergency telephone**

+49 (0)2452 91260 (Only available during office hours.)

**number:**

+49 (0)2452 9126555

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No 1272/2008**

Acute Tox. 4; H302

Skin Sens. 1; H317

Full text of hazard statements: see SECTION 16.

**2.2. Label elements****Regulation (EC) No 1272/2008****Hazard components for labelling**

sodium thioglycolate

**Signal word:** Warning**Pictograms:**

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### Hazard statements

- H302 Harmful if swallowed.  
H317 May cause an allergic skin reaction.

### Precautionary statements

- P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P261 Avoid breathing Vapour.  
P280 Wear protective gloves.  
P302+P352 IF ON SKIN: Wash with plenty of Water.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

### Additional advice on labelling

The product is classified and labelled according to EC directives or corresponding national laws.

### 2.3. Other hazards

No information available.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Chemical characterization

Aqueous solution with organic substances.

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
367-51-1	sodium thioglycolate			< 25 %
	206-696-4		01-2119968564-24	
	Met. Corr. 1, Acute Tox. 3, Acute Tox. 4, Skin Sens. 1; H290 H301 H312 H317			

Full text of H and EUH statements: see section 16.

#### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
367-51-1	206-696-4	sodium thioglycolate	< 25 %
		inhalation: LC50 = > 2729 mg/l (dusts or mists); dermal: LD50 = > 1000-2000 mg/kg; oral: LD50 = > 50-200 mg/kg	

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

Remove contaminated, saturated clothing immediately.

#### After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

#### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

#### After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

#### After ingestion

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink plenty of water. Induce

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vomiting when the affected person is not unconscious. Call a physician immediately.

**4.2. Most important symptoms and effects, both acute and delayed**

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. May cause an allergic skin reaction.

**4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Co-ordinate fire-fighting measures to the fire surroundings.

**Unsuitable extinguishing media**

no restriction

**5.2. Special hazards arising from the substance or mixture**

Non-flammable. The product itself does not burn. In case of fire may be liberated: Sulphur oxides, Hydrogen sulphide (H<sub>2</sub>S).

**5.3. Advice for firefighters**

Wear a self-contained breathing apparatus and chemical protective clothing.

**Additional information**

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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

Provide adequate ventilation. Do not breathe vapour. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

**For non-emergency personnel**

First aider: Pay attention to self-protection! Remove persons to safety.

**For emergency responders**

Cover drains. Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Use personal protection equipment.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

**6.3. Methods and material for containment and cleaning up****For containment**

Make sure spills can be contained, e.g. in sump pallets or kerbed areas. Contain leaks or spills within cabinets with removable trays.

**For cleaning up**

Large amounts of spillages: Use approved industrial vacuum cleaner for removal.  
Small amounts of spillages: Wipe up with absorbent material (eg. cloth, fleece).  
Clear contaminated areas thoroughly. Clean contaminated articles and floor according to the environmental legislation.

**Other information**

Treat the recovered material as prescribed in the section on waste disposal.

**6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

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**SECTION 7: Handling and storage**
**7.1. Precautions for safe handling**
**Advice on safe handling**

Keep out of reach of children.

**Advice on protection against fire and explosion**

No special fire protection measures are necessary.

**Advice on general occupational hygiene**

Avoid contact with skin, eyes and clothes. Remove contaminated, saturated clothing immediately.

Keep away from food, drink and animal feedingstuffs. Do not eat, drink or smoke when using this product.

Wash hands and face before breaks and after work and take a shower if necessary. Draw up and observe skin protection programme.

**Further information on handling**

Handle and open container with care. Put lids on containers immediately after use.

**7.2. Conditions for safe storage, including any incompatibilities**
**Requirements for storage rooms and vessels**

Keep locked up. Keep container tightly closed. Store in a place accessible by authorized persons only.

Keep/Store only in original container. Protect from direct sunlight.

Do not store at temperatures below 0°C. Recommended storage temperature: at room temperature

**Hints on joint storage**

No materials to be specially mentioned

**Further information on storage conditions**

No special measures are necessary. The product is stable under storage at normal ambient temperatures.

**7.3. Specific end use(s)**

Solution for monitoring water parameters in aquarium and tap water.

**SECTION 8: Exposure controls/personal protection**
**8.1. Control parameters**
**DNEL/DMEL values**

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
367-51-1	sodium thioglycolate			
Consumer DNEL, long-term		inhalation	systemic	0,348 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	1,03 mg/kg bw/day
Consumer DNEL, long-term		dermal	local	0,004 mg/cm <sup>2</sup>
Consumer DNEL, long-term		oral	systemic	0,002 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	1,41 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	2,06 mg/kg bw/day
Worker DNEL, long-term		dermal	local	0,004 mg/cm <sup>2</sup>

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### PNEC values

CAS No	Substance	
Environmental compartment		Value
367-51-1	sodium thioglycolate	
Freshwater		0,038 mg/l
Marine water		0,0038 mg/l
Micro-organisms in sewage treatment plants (STP)		3,2 mg/l

### Additional advice on limit values

To date, no national critical limit values exist.

When using do not eat, drink, smoke, sniff.

### 8.2. Exposure controls

#### Appropriate engineering controls

No special technical protective measures are necessary.

#### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Avoid contact with eyes. Suitable eye protection: goggles. not required under normal use.

##### Hand protection

Avoid contact with skin. Wear suitable gloves.

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material: 0,4 mm

Permeation time (maximum wear duration): > 8 h

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

##### Skin protection

Wear suitable protective clothing. Not required because of small size of the container

##### Respiratory protection

Usually no personal respirative protection necessary. In case of inadequate ventilation wear respiratory protection. In the case of vapour formation use a respirator with filter model B2 (according to DIN 3181, 1980).

##### Thermal hazards

Non-flammable. The product itself does not burn. Thermal decomposition can lead to the escape of irritating gases and vapours. In case of fire may be liberated: Sulphur oxides, Hydrogen sulphide (H<sub>2</sub>S).

##### Environmental exposure controls

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	light pink
Odour:	rotten-egg like
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 explosion limits:	not determined
Upper explosion limits:	not determined

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Flash point:	> 100 °C
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value (at 20 °C):	6,4-7,0
Viscosity / kinematic:	not determined
Water solubility:	completely miscible
(at 20 °C)	
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Vapour pressure:	not determined
Density:	not determined
Bulk density:	not applicable
Relative vapour density:	not determined

### 9.2. Other information

#### Information with regard to physical hazard classes

##### Explosive properties

No ignition, explosion, self-heating or visible decomposition.

The product is not: Explosive

##### Sustaining combustion:

Not sustaining combustion

##### Self-ignition temperature

Solid:

not applicable

Gas:

not applicable

##### Oxidizing properties

Not oxidising.

#### Other safety characteristics

##### Evaporation rate:

not determined

##### Solvent separation test:

No data available

##### Solvent content:

not determined

##### Solid content:

not determined

##### Sublimation point:

not applicable

##### Softening point:

not applicable

##### Pour point:

not determined

##### Viscosity / dynamic:

not determined

##### Flow time:

not determined

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

### 10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

### 10.3. Possibility of hazardous reactions

Exothermic reaction with: Acid, Oxidising agent: Release of an acute toxic gas (Hydrogen sulphide (H<sub>2</sub>S))

### 10.4. Conditions to avoid

Protect from direct sunlight.

### 10.5. Incompatible materials

Keep away from: Acid, Oxidising agent

### 10.6. Hazardous decomposition products

Sulphur oxides, Hydrogen sulphide (H<sub>2</sub>S).

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Thermal decomposition can lead to the escape of irritating gases and vapours.

## SECTION 11: Toxicological information

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

#### Toxicokinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

#### Acute toxicity

Harmful if swallowed.

#### ATEmix calculated

ATE (oral) 510,2 mg/kg; ATE (dermal) 10204,1 mg/kg

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
367-51-1	sodium thioglycolate				
	oral	LD50 > 50-200 mg/kg	Rat	SDS	OECD 423
	dermal	LD50 > 1000-2000 mg/kg	Rat		OECD 402
	inhalation (4 h) dust/mist	LC50 > 2729 mg/l	Rat	SDS	OECD 403

#### Irritation and corrosivity

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

Prolonged or repeated contact with skin or mucous membrane result in irritation symptoms such as redness, blistering, dermatitis, etc.

#### Sensitising effects

May cause an allergic skin reaction. (sodium thioglycolate)

#### Carcinogenic/mutagenic/toxic effects for reproduction

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.

#### Information on likely routes of exposure

Skin contact, Ingestion, Eye contact, Inhalation

#### Specific effects in experiment on an animal

There are no data available on the preparation/mixture itself.

#### Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

#### Practical experience

There are no data available on the preparation/mixture itself.

### 11.2. Information on other hazards

#### Endocrine disrupting properties

There are no data available on the preparation/mixture itself.

#### Other information

There are no data available on the preparation/mixture itself.

#### Further information

Description of possible hazardous to health effects is based on experience and/or toxicological characteristics

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of several components.

Handle in accordance with good industrial hygiene and safety practice.

Health injuries are not known or expected under normal use.

## SECTION 12: Ecological information

### 12.1. Toxicity

There are no data available on the preparation/mixture itself. Ecological injuries are not known or expected under normal use.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
367-51-1	sodium thioglycolate					
	Acute fish toxicity	LC50 > 100 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		OECD 203
	Acute algae toxicity	ErC50 > 100 mg/l	72 h	Desmodesmus subspicatus		OECD 201
	Acute crustacea toxicity	EC50 38 mg/l	48 h	Daphnia magna (Big water flea)		84/449/EEC C.2
	Acute bacteria toxicity	(EC50 820 mg/l)	0,5 h	Activated sludge		OECD 209

### 12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
367-51-1	sodium thioglycolate			
	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	60 %		ECHA

### 12.3. Bioaccumulative potential

The product has not been tested.

### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
367-51-1	sodium thioglycolate	-2,99

### 12.4. Mobility in soil

The product has not been tested.

### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

### 12.7. Other adverse effects

No information available.

### Further information

Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

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### List of Wastes Code - residues/unused products

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

### List of Wastes Code - used product

160508 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; discarded organic chemicals consisting of or containing hazardous substances; hazardous waste

### List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

### Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

## SECTION 14: Transport information

### Land transport (ADR/RID)

**14.1. UN number or ID number:** UN 2810  
**14.2. UN proper shipping name:** TOXIC LIQUID, ORGANIC, N.O.S. (sodium thioglycolate)  
**14.3. Transport hazard class(es):** 6.1  
**14.4. Packing group:** III  
Hazard label: 6.1  
Classification code: T1  
Special Provisions: 274 614  
Limited quantity: 5 L  
Excepted quantity: E1  
Transport category: 2  
Hazard No: 60  
Tunnel restriction code: E

### Inland waterways transport (ADN)

**14.1. UN number or ID number:** UN 2810  
**14.2. UN proper shipping name:** TOXIC LIQUID, ORGANIC, N.O.S. (sodium thioglycolate)  
**14.3. Transport hazard class(es):** 6.1  
**14.4. Packing group:** III  
Hazard label: 6.1  
Classification code: T1  
Special Provisions: 274 614 802  
Limited quantity: 5 L  
Excepted quantity: E1

### Marine transport (IMDG)

**14.1. UN number or ID number:** UN 2810  
**14.2. UN proper shipping name:** TOXIC LIQUID, ORGANIC, N.O.S. (sodium thioglycolate)  
**14.3. Transport hazard class(es):** 6.1  
**14.4. Packing group:** III  
Hazard label: 6.1  
Special Provisions: 223 274  
Limited quantity: 5 L  
Excepted quantity: E1  
EmS: F-A, S-A

### Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number or ID number:** UN 2810  
**14.2. UN proper shipping name:** TOXIC LIQUID, ORGANIC, N.O.S. (sodium thioglycolate)

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<b>14.3. Transport hazard class(es):</b>	6.1	
<b>14.4. Packing group:</b>	III	
Hazard label:	6.1	
Special Provisions:	A3 A4 A137	
Limited quantity Passenger:	2 L	
Passenger LQ:	Y642	
Excepted quantity:	E1	
IATA-packing instructions - Passenger:		655
IATA-max. quantity - Passenger:		60 L
IATA-packing instructions - Cargo:		663
IATA-max. quantity - Cargo:		220 L

### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

### 14.6. Special precautions for user

Warning: May cause an allergic skin reaction.

### 14.7. Maritime transport in bulk according to IMO instruments

not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

#### Additional information

To follow: 850/2004/EC, 79/117/EEC, 689/2008/EC

#### National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).  
 Water hazard class (D): 2 - obviously hazardous to water  
 Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information

### Changes

This data sheet contains changes from the previous version in section(s): 14.

### Abbreviations and acronyms

ADR: Accord européen sur le transport 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 Harmonized 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  
 LC50: Lethal concentration, 50%  
 LD50: Lethal dose, 50%

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**Key literature references and sources for data**

Safety Data Sheet, ECHA

**Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]**

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method
Skin Sens. 1; H317	Calculation method

**Relevant H and EUH statements (number and full text)**

H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H317	May cause an allergic skin reaction.

**Further Information**

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP].

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*