

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**22756-99 TPTZ Iron Reagent**

Revision date: 22.06.2017

Product code: 2275699

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

22756-99 TPTZ Iron Reagent

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

Water analysis

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

Company name: HACH LANGE GmbH  
Street: Willstätterstr. 11  
Place: D-40549 Düsseldorf  
Telephone: +49 (0)211 5288-383  
e-mail: SDS@hach.com  
Internet: www.de.hach.com  
Responsible Department: HACH LANGE Ltd.  
5, Pacific Way  
Salford Manchester M50 1DL - United Kingdom  
Tel. +44 (0) 161 872 1487 \* Fax +44 (0) 161 848 7324  
e-Mail: info-uk@hach.com

HACH LANGE Ltd.  
Unit 1, Chestnut Road Western Industrial Estate  
IRL-Dublin 12  
Tel. +353 (0)1 4602522  
e-Mail: info-ie@hach.com

**1.4. Emergency telephone number:**

Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency service -

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

Hazard categories:

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Dam. 1

Respiratory or skin sensitisation: Resp. Sens. 1

Specific target organ toxicity - single exposure: STOT SE 3

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Harmful if swallowed.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause respiratory irritation.

Causes serious eye damage.

Causes skin irritation.

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

sodium metabisulphite

sodium dithionite; sodium hydrosulphite

**Signal word:** Danger

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#### Pictograms:



#### Hazard statements

H302	Harmful if swallowed.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H318	Causes serious eye damage.
H315	Causes skin irritation.

#### Precautionary statements

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P362	Take off contaminated clothing.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

#### Special labelling of certain mixtures

EUH031	Contact with acids liberates toxic gas.
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#### Additional advice on labelling

The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

#### 2.3. Other hazards

None known.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

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## Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
10102-17-7	Sodium thiosulfate			35-45 %
	231-867-5			
7681-57-4	sodium metabisulphite			15-25 %
	231-673-0	016-063-00-2		
	Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Resp. Sens. 1, STOT SE 3; H332 H302 H315 H318 H334 H335 EUH031			
18996-35-5	Citric acid monosodium salt			15-25 %
	242-734-6			
	Acute Tox. 4, Eye Irrit. 2; H302 H319			
7775-14-6	sodium dithionite; sodium hydrosulphite			10-20 %
	231-890-0	016-028-00-1		
	Self-heat. 1, Acute Tox. 4; H251 H302 EUH031			

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

## SECTION 4: First aid measures

## 4.1. Description of first aid measures

## General information

Take off all contaminated clothing immediately.

## After inhalation

Move to fresh air. Consult a physician. Show this safety data sheet to the doctor in attendance.

## After contact with skin

Wash off with soap and water. If symptoms persist, call a physician.

## After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

## After ingestion

Drink 1 or 2 glasses of water. Prevent vomiting if possible. Call a physician immediately. Show this safety data sheet to the doctor in attendance.

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

Irritation and corrosion

## 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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

Fire may liberate hazardous vapours.

The following may develop in event of fire: sulfur oxides., Sodium oxides, Carbon monoxide, Carbon dioxide (CO<sub>2</sub>)

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**5.3. Advice for firefighters**

In the event of fire, wear self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

**Additional information**

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

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

Use personal protective equipment.

**6.2. Environmental precautions**

Do not flush into surface water or sanitary sewer system.

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

Sweep up or vacuum up spillage and collect in suitable container for disposal.

**6.4. Reference to other sections**

13. Disposal considerations

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

Avoid contact with skin and eyes. Use only in well-ventilated areas. Do not breathe vapours/dust.

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

Keep at temperatures between 10 and 25 °C. Keep in a dry place. Keep away from heat.

**Hints on joint storage**

Incompatible with strong acids and oxidizing agents.

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

Laboratory chemicals

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
7681-57-4	Disodium disulphite	-	5		TWA (8 h)	WEL

**Additional advice on limit values**

None known.

**8.2. Exposure controls****Appropriate engineering controls**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

**Protective and hygiene measures**

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Wash hands before breaks and after work.

**Eye/face protection**

Safety glasses with side-shields

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#### Hand protection

Use barrier skin cream.

Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. In full contact:

Gloves material: Viton, Layer thickness: 0.70 mm, Breakthrough time: >480 min. In splash contact: Glove material: nitrile rubber, Layer thickness 0,20 mm, Breakthrough time: > 30 min

#### Skin protection

Avoid contact with skin, eyes and clothing.

#### Respiratory protection

Provide adequate ventilation.

## SECTION 9: Physical and chemical properties

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

Physical state:	solid
Colour:	white
Odour:	sulphurous
pH-Value (at 20 °C):	3,8 (1 % solution)

#### Changes in the physical state

Melting point:	180-185 °C
Initial boiling point and boiling range:	not applicable
Sublimation point:	no data available
Softening point:	not applicable
Pour point:	not applicable
Flash point:	not applicable

#### Flammability

Solid:	no data available
Gas:	no data available

#### Explosive properties

no data available

Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Ignition temperature:	not applicable

#### Auto-ignition temperature

Solid:	no data available
Gas:	no data available

Decomposition temperature:	no data available
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#### Oxidizing properties

not applicable

Vapour pressure:	not applicable
Density (at 20 °C):	2,23 g/cm <sup>3</sup>
Bulk density:	no data available
Water solubility: (at 20 °C)	soluble

#### Solubility in other solvents

no data available

Partition coefficient:	not applicable
Viscosity / dynamic:	not applicable

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Viscosity / kinematic:	not applicable
Flow time:	not applicable
Vapour density:	not applicable
Evaporation rate:	not applicable
Solvent separation test:	not applicable
Solvent content:	not applicable

#### 9.2. Other information

Solid content:	no data available
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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Reactivity Hazard: Oxidizing agents, Acids

#### 10.2. Chemical stability

Stable under recommended storage conditions.

#### 10.3. Possibility of hazardous reactions

Reacts with the following substances: Oxidizing agents, Acids

#### 10.4. Conditions to avoid

Product is sensitive to light and moisture.

#### 10.5. Incompatible materials

Oxidizing agents, Acids

#### 10.6. Hazardous decomposition products

Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Sulphur oxides, nitrogen oxides (NO<sub>x</sub>)

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Toxicokinetics, metabolism and distribution

No toxicology information is available.

##### Acute toxicity

No data is available on the product itself.

##### ATEmix calculated

ATE (oral) 1891,7 mg/kg

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
10102-17-7	Sodium thiosulfate				
	oral	LD50 mg/kg	>5000	rat	RTECS
7681-57-4	sodium metabisulphite				
	oral	LD50 mg/kg	1131	Rat	
	dermal	LD50 mg/kg	>2000	Rat	
	inhalation vapour	ATE	11 mg/l		
	inhalation (4 h) aerosol	LC50	2,01 mg/l	Rat	
18996-35-5	Citric acid monosodium salt				
	oral	LD50 mg/kg	1700	rat	
7775-14-6	sodium dithionite; sodium hydrosulphite				
	oral	ATE mg/kg	500		

**Irritation and corrosivity**

H318 - Causes serious eye damage.  
May cause skin irritation.

**Sensitising effects**

May cause sensitisation by inhalation.

**STOT-single exposure**

The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.

**STOT-repeated exposure**

This information is not available.

**Aspiration hazard**

No aspiration toxicity classification

**Specific effects in experiment on an animal**

No data is available on the product itself.

**Further information**

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

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

No data is available on the product itself. Do not let product enter drains.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
10102-17-7	Sodium thiosulfate					
	Acute fish toxicity	LC50 mg/l	>10000	96 h		
	Acute crustacea toxicity	EC50 mg/l	1223	48 h		
7681-57-4	sodium metabisulphite					
	Acute fish toxicity	LC50 220 mg/l	150 -	96 h	Onchorhynchus mykiss	
	Acute crustacea toxicity	EC50	89 mg/l	48 h	Daphnia magna (Water flea)	

**12.2. Persistence and degradability**

No data is available on the product itself.

**12.3. Bioaccumulative potential**

No data is available on the product itself.

**12.4. Mobility in soil**

no data available

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

no data available

**12.6. Other adverse effects**

No known effect.

**SECTION 13: Disposal considerations**
**13.1. Waste treatment methods**
**Advice on disposal**

In accordance with local and national regulations.

**Waste disposal number of waste from residues/unused products**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

**Waste disposal number of used product**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

**Waste disposal number of contaminated packaging**

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

**SECTION 14: Transport information**
**Land transport (ADR/RID)**
**Other applicable information (land transport)**

Not subject to transport regulations.

**Inland waterways transport (ADN)**
**Other applicable information (inland waterways transport)**

Not tested

**Marine transport (IMDG)**



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#### Other applicable information (marine transport)

Not subject to transport regulations.

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

#### Other applicable information (air transport)

Not subject to transport regulations.

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

#### 14.6. Special precautions for user

no data available

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not relevant

### SECTION 15: Regulatory information

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

##### National regulatory information

Water contaminating class (D): 2 - clearly water contaminating

#### 15.2. Chemical safety assessment

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

### SECTION 16: Other information

#### Changes

Revision: 22.06.2017

Safety datasheet sections which have been updated: 2, 3, 11

Revision: 20.04.2015

Safety datasheet sections which have been updated: 2, 11

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

H251	Self-heating: may catch fire.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
EUH031	Contact with acids liberates toxic gas.

#### Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

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