

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**26588-25 HgEx Reagent A Stannous Sulfate Solution**

Revision date: 05.09.2017

Product code: 2658825

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

26588-25 HgEx Reagent A Stannous Sulfate Solution

**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:

Skin corrosion/irritation: Skin Corr. 1A

Serious eye damage/eye irritation: Eye Dam. 1

Respiratory or skin sensitisation: Skin Sens. 1

Germ cell mutagenicity: Muta. 2

Reproductive toxicity: Repr. 2

Specific target organ toxicity - repeated exposure: STOT RE 2

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:

Causes severe skin burns and eye damage.

Causes serious eye damage.

May cause an allergic skin reaction.

Suspected of causing genetic defects.

Suspected of damaging fertility. Suspected of damaging the unborn child.

May cause damage to organs through prolonged or repeated exposure.

Toxic to aquatic life with long lasting effects.

**2.2. Label elements****Regulation (EC) No. 1272/2008**

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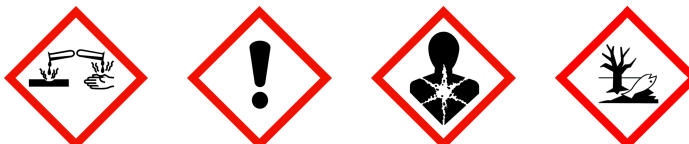
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**Hazard components for labelling**

 Tin(II) sulfate  
 sulphuric acid ... %

**Signal word:** Danger

**Pictograms:**

**Hazard statements**

H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H341	Suspected of causing genetic defects.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P201	Obtain special instructions before use.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310	Immediately call a POISON CENTER/doctor.

**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**
**Hazardous components**

CAS No	Chemical name	Quantity
	EC No	
	Index No	
	REACH No	
	GHS Classification	
7732-18-5	Water	85-95 %
	231-791-2	
7488-55-3	Tin(II) sulfate	5-15 %
	231-302-2	
	Muta. 2, Repr. 2, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT SE 3, STOT RE 2, Aquatic Chronic 1; H341 H361 H332 H315 H319 H317 H335 H373 H410	
7664-93-9	sulphuric acid ... %	1-5 %
	231-639-5	016-020-00-8
	Skin Corr. 1A; H314	

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

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#### SECTION 4: First aid measures

##### 4.1. Description of first aid measures

###### General information

Take off all contaminated clothing immediately.  
Consult a physician. Show this safety data sheet to the doctor in attendance.

###### After inhalation

Move to fresh air.  
If symptoms persist, call a physician.

###### After contact with skin

Wash off immediately with plenty of water.  
Take off all contaminated clothing immediately.  
If skin irritation persists, call a physician.

###### After contact with eyes

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

###### After ingestion

Clean mouth with water and drink afterwards plenty of water.  
Do NOT induce vomiting.  
Never give anything by mouth to an unconscious person.  
Call a physician immediately.

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

Acute dermal irritation/corrosion.  
Serious eye damage/eye irritation.  
Respiratory or skin sensitisation.  
Germ cell mutagenicity & Reproductive toxicity

##### 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. The product itself does not burn.

###### Unsuitable extinguishing media

None known.

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

Fire may liberate hazardous vapours.

##### 5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

###### 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.  
Only qualified personnel equipped with suitable protective equipment may intervene.  
Mark the contaminated area with signs and prevent access to unauthorized personnel.

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#### 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.  
Should not be released into the environment.

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

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local/national regulations (see section 13).

#### 6.4. Reference to other sections

13. Disposal considerations

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### **Advice on safe handling**

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

#### **Advice on protection against fire and explosion**

See also section 5

#### **Further information on handling**

Observe label precautions.

### 7.2. Conditions for safe storage, including any incompatibilities

#### **Requirements for storage rooms and vessels**

Keep in a dry, cool place.

#### **Hints on joint storage**

None known.

#### **Further information on storage conditions**

None known.

### 7.3. Specific end use(s)

Reagent for analysis

## 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
7664-93-9	Sulphuric acid (mist)	-	0.05		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.

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#### Eye/face protection

Chemical resistant goggles must be worn.

#### 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: &gt;480 min. In splash contact: Glove material: nitrile rubber, Layer thickness 0,20 mm, Breakthrough time: &gt; 30 min

#### Skin protection

Avoid contact with skin, eyes and clothing.

Remove and wash contaminated clothing before re-use.

#### Respiratory protection

Provide adequate ventilation.

In case of insufficient ventilation, wear suitable respiratory equipment.

#### Environmental exposure controls

Do not flush into surface water or sanitary sewer system.

Prevent further leakage or spillage if safe to do so.

## SECTION 9: Physical and chemical properties

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

Physical state:	liquid
Colour:	dark green
Odour:	stinging
pH-Value (at 20 °C):	< 1

#### Changes in the physical state

Melting point:	no data available
Initial boiling point and boiling range:	100 °C
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	not applicable
:	no data available
Flash point:	not applicable
Sustaining combustion:	No data available

#### Flammability

Solid:	not applicable
Gas:	not applicable

#### Explosive properties

not applicable

Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Ignition temperature:	no data available

#### Auto-ignition temperature

Solid:	not applicable
Gas:	not applicable

Decomposition temperature: no data available

#### Oxidizing properties

not applicable

Vapour pressure: no data available

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Vapour pressure:	no data available
Density (at 20 °C):	1,10 g/cm <sup>3</sup>
Bulk density:	not applicable
Water solubility:	soluble
<b>Solubility in other solvents</b>	
no data available	
Partition coefficient:	no data available
Viscosity / dynamic:	no data available
Viscosity / kinematic:	no data available
Flow time:	no data available
Vapour density:	no data available
Evaporation rate:	no data available
Solvent separation test:	no data available
Solvent content:	no data available

**9.2. Other information**

Solid content:	not applicable
no data available	

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

See also section 10.3

**10.2. Chemical stability**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

No dangerous reaction known under conditions of normal use.

**10.4. Conditions to avoid**Extremes of temperature and direct sunlight.  
To avoid thermal decomposition, do not overheat.**10.5. Incompatible materials**

None known.

**10.6. Hazardous decomposition products**Sulphur oxides  
Tin oxide fumes.**Further information**

None known.

**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.

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7488-55-3	Tin(II) sulfate				
	oral	LD50 mg/kg	2210	rat	
	inhalation vapour	ATE	11 mg/l		
	inhalation (4 h) aerosol	LC50	2 mg/l	rat	

**Irritation and corrosivity**

Causes skin and eye burns.

**Sensitising effects**

May cause allergic skin reaction.

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

H341 - Suspected of causing genetic defects.

H361 - Suspected of damaging fertility or the unborn child.

**STOT-single exposure**

The substance or mixture is not classified as specific target organ toxicant, single exposure.

**STOT-repeated exposure**

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

**Aspiration hazard**

No aspiration toxicity classification

**Specific effects in experiment on an animal**

No data is available on the product itself.

**Additional information on tests**

None known.

**Practical experience**
**Observations relevant to classification**

None known.

**Other observations**

None known.

**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**

Do not flush into surface water or sanitary sewer system.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
7488-55-3	Tin(II) sulfate					
	Acute algae toxicity	ErC50 mg/l	0,21	72 h	Skeletonema costatum	
	Acute crustacea toxicity	EC50	22 mg/l	48 h	Daphnia magna (Water flea)	
	Crustacea toxicity	NOEC mg/l	0,18	21 d	Daphnia magna (Water flea)	

**12.2. Persistence and degradability**

No data is available on the product itself.

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#### **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.

#### **Further information**

no data available

### SECTION 13: Disposal considerations

#### **13.1. Waste treatment methods**

##### **Disposal recommendations**

In accordance with local and national regulations.

##### **List of Wastes Code - 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

##### **List of Wastes Code - 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

##### **List of Wastes Code - 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

##### **Contaminated packaging**

Dispose of as unused product.

The hazard and precautionary statements displayed on the label also apply to any residues left in the container.

### SECTION 14: Transport information

#### **Land transport (ADR/RID)**

##### **Other applicable information (land transport)**

Not subject to transport regulations.

: 375 (ADR)

#### **Inland waterways transport (ADN)**

##### **Other applicable information (inland waterways transport)**

Not tested

#### **Marine transport (IMDG)**

##### **Other applicable information (marine transport)**

Not subject to transport regulations.

: 2.10.2.7 (IMDG)

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

##### **Other applicable information (air transport)**

Not subject to transport regulations.

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#### **14.5. Environmental hazards**



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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 applicable

#### Other applicable information

no data available

### SECTION 15: Regulatory information

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

##### National regulatory information

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

#### 15.2. Chemical safety assessment

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

### SECTION 16: Other information

#### Changes

Revision: 05.09.2017

Safety datasheet sections which have been updated: 2, 10, 11

Revision: 03.11.2015

Safety datasheet sections which have been updated: 2, 4, 6-9, 11, 13, 16

Revision: 29.11.2013

Safety datasheet sections which have been updated: 2

Revision: 24.01.2008

Safety datasheet sections which have been updated: 1-16

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

Classification	Classification procedure
Skin Corr. 1A; H314	On basis of test data
Eye Dam. 1; H318	On basis of test data
Skin Sens. 1; H317	Calculation method
Muta. 2; H341	Calculation method
Repr. 2; H361fd	Calculation method
STOT RE 2; H373	
Aquatic Chronic 2; H411	Calculation method

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

H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H361	Suspected of damaging fertility or the unborn child.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

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**Further Information**

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

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