SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name

Schuetze reagent

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses of the substance or mixture
chemical analysis

Uses advised against
No data available.

1.3 Details of the supplier of the safety data sheet

Address
ELTRA GmbH
Retsch-Allee 1-5

42781 Haan
GERMANY

Telephone no. +49 (0) 2104 23 33-400
Fax no. +49 (0) 2104 23 33-499

Information provided by / telephone
+49 (0) 2104 23 33-192

Advice on Safety Data Sheet
info@eltra.com

1.4 Emergency telephone number

For medical advice (in German and English):
+49 (0)551 192 40 (Giftinformationszentrum Nord)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification in accordance with Regulation (EC) No 1272/2008 (CLP)
Eye Dam. 1; H318
Ox. Sol. 3; H272
Skin Corr. 1B; H314

Classification information
This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:
Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP
Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)

Hazard pictograms


GHS03


GHS05

Signal word
Danger

Hazardous component(s) to be indicated on label:
diiodine-pentaoxide

Hazard statement(s)

H272	May intensify fire; oxidiser.
H314	Causes severe skin burns and eye damage.

Precautionary statement(s)

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P221	Take any precaution to avoid mixing with combustibles.
P264	Wash thoroughly after handling.
P280	Wear protective gloves/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P370+P378	In case of fire: Use water spray, extinguishing powder, foam or CO2 to extinguish.

2.3 Other hazards

PBT assessment
According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be PBT.

vPvB assessment
According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable. The product is not a substance.

3.2 Mixtures

Chemical characterization
Mixture

Hazardous ingredients

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	**diiodine-pentaoxide**			
	12029-98-0 234-740-2 - -	Ox. Sol. 3; H272 Skin Corr. 1B; H314	>= 10.00 - < 25.00	wt%
2	**sulphuric acid**			
	7664-93-9 231-639-5 016-020-00-8 -	Skin Corr. 1A; H314	>= 10.00 - < 25.00	wt%
3	**SILICON DIOXIDE (AMORPHOUS)**			
	112926-00-8 231-545-4 - -	-	>= 50.00 - < 70.00	wt%

Full Text for all H-phrases and EUH-phrases: pls. see section 16

No	Note	Specific concentration limits	M-factor (acute)	M-factor (chronic)
2	B	Eye Irrit. 2; H319: C >= 5% Skin Irrit. 2; H315: C >= 5% Skin Corr. 1A; H314: C >= 15%	-	-

Full text for the notes: pls. see section 16 “Notes relating to the identification, classification and labelling of substances ((EC) No 1272/2008, Annex VI)”.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information
Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing.

After inhalation
Remove affected person from the immediate area. Ensure supply of fresh air. In case of persisting adverse effects consult a physician.

After skin contact
When in contact with the skin, clean with soap and water. Consult a doctor if skin irritation persists.

After eye contact
Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Get immediate ophthalmic treatment.

After ingestion
Do not induce vomiting. Rinse out mouth and give plenty of water to drink. Never give anything by mouth to an unconscious person. Get medical attention if pain still persists.

4.2 Most important symptoms and effects, both acute and delayed
No data available.

4.3 Indication of any immediate medical attention and special treatment needed
No data available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
Dry chemical extinguisher; Carbon dioxide

Unsuitable extinguishing media
High power water jet

5.2 Special hazards arising from the substance or mixture
In case of fires, hazardous combustion gases are formed: Carbon dioxide (CO2); Nitrogen oxides (NOx); Carbon monoxide (CO); Sulphur oxides (SxOy); Iodine; Hydrogen; Contact with combustible materials, flammable material or powdered metals can cause fire or explosion. Product reacts with water. Contact with water or moisture may generate heat and may lead to ignition of combustible materials.

5.3 Advice for firefighters
Use self-contained breathing apparatus. Containers close to fire should be transferred to a safe place. Wear protective clothing. Cool endangered containers with water in case of fire. Do not allow water to get into container.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid dust formation.

For emergency responders
Personal protective equipment (PPE) - see section 8.

6.2 Environmental precautions
Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up
Take up mechanically. When collected, handle material as described under the section heading "Disposal considerations". Do not flush with water or aqueous cleaning agents.

6.4 Reference to other sections
Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling
Provide good ventilation at the work area (local exhaust ventilation, if necessary). Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances.

General protective and hygiene measures
Keep away from foodstuffs and beverages. Do not eat, drink or smoke during work time. Wash hands before breaks and after work. Remove soiled or soaked clothing immediately. Avoid contact with eyes and skin. Do not inhale dust. Provide eye wash fountain in work area. Have emergency shower available.

Advice on protection against fire and explosion
Keep away from sources of heat and ignition.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions
Keep container tightly closed and dry in a cool, well-ventilated place. Protect from atmospheric moisture and water.

Requirements for storage rooms and vessels
Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original.

Incompatible products
Do not store together with: Hydrogen fluoride; Reducing agents; inflammatory substances; Bases; oxidizing agents; Metals

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

No	Substance name	CAS no.	EC no.
1	**SILICON DIOXIDE (AMORPHOUS)**	**112926-00-8**	**231-545-4**
	List of approved workplace exposure limits (WELs) / EH40		
	Silica, amorphous inhalable dust		
	WEL long-term (8-hr TWA reference period)	6 mg/m³	
	List of approved workplace exposure limits (WELs) / EH40		
	Silica, amorphous respirable dust		
	WEL long-term (8-hr TWA reference period)	2.4 mg/m³	
2	**sulphuric acid**	**7664-93-9**	**231-639-5**
	List of approved workplace exposure limits (WELs) / EH40		
	Sulphuric acid mist		
	WEL long-term (8-hr TWA reference period)	0.05 mg/m³	
	Comments	The mist is defined as the thoracic fraction	
	2009/161/EU		
	Sulphuric acid (mist)		
	mist		
	WEL long-term (8-hr TWA reference period)	0,05 (8) (9) mg/m³	

8.2 Exposure controls

Appropriate engineering controls
Ensure adequate ventilation, local exhaust at the work station if necessary.

Personal protective equipment

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of dust, aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection
Tightly fitting safety glasses (EN 166).

Hand protection
In case of intensive contact, wear protective gloves (EN 374). Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

Other
Normal chemical work clothing.

Environmental exposure controls
No data available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

State of aggregation
solid

Form
granules

Colour
yellow

Odour
odourless

pH value
Not applicable

Boiling point / boiling range
No data available

Melting point/freezing point
No data available

Decomposition temperature
No data available

Flash point
Not applicable

Ignition temperature
no data available

Auto-ignition temperature
no data available

Flammability
No data available

Lower explosion limit
No data available

Upper explosion limit
No data available

Vapour pressure
Not applicable

Relative vapour density

No data available

Relative density
No data available

Density
Not applicable

Solubility in water	
Comments	easily soluble

Solubility
No data available

Partition coefficient n-octanol/water (log value)
No data available

Kinematic viscosity
Not applicable

Particle characteristics
No data available

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity

10.1 Reactivity
No data available.

10.2 Chemical stability
Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions
Dangerous reactions are not to be expected when handling product according to its intended use.

10.4 Conditions to avoid
Protect against humidity.

10.5 Incompatible materials
hydrogen fluoride; organic materials; Reducing agents; Metals; strong bases; Oxidizing agents; Sulphides; Cyanide; combustible materials

10.6 Hazardous decomposition products
Carbon monoxide and carbon dioxide; Iodine; Sulphurous oxides (SOx); Hydrogen

SECTION 11: Toxicological information

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

Acute oral toxicity
No data available

Acute dermal toxicity
No data available

Acute inhalational toxicity
No data available

Skin corrosion/irritation
No data available

Serious eye damage/irritation
No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity
No data available

Reproduction toxicity
No data available

Carcinogenicity
No data available

STOT - single exposure
No data available

STOT - repeated exposure
No data available

Aspiration hazard
No data available

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Irritates the eyes and the skin.

11.2 Information on other hazards

Endocrine disrupting properties
No data available.

Other information
No data available.

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish (acute)
No data available

Toxicity to fish (chronic)
No data available

Toxicity to Daphnia (acute)
No data available

Toxicity to Daphnia (chronic)
No data available

Toxicity to algae (acute)
No data available

Toxicity to algae (chronic)
No data available

Bacteria toxicity
No data available

12.2 Persistence and degradability
No data available.

12.3 Bioaccumulative potential
No data available.

12.4 Mobility in soil
No data available.

12.5 Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	
PBT assessment	According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be PBT.

vPvB assessment	According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be vPvB.

12.6 Endocrine disrupting properties
No data available.

12.7 Other adverse effects
No data available.

12.8 Other information

Other information
Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product
Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

Packaging
Residues must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information

14.1 UN number or ID number

ADR/RID/ADN	UN3085
IMDG	UN3085
ICAO-TI / IATA	UN3085

14.2 UN proper shipping name

ADR/RID/ADN	OXIDIZING SOLID, CORROSIVE, N.O.S.
Technical name	diiodine-pentaoxide sulphuric acid
IMDG	OXIDIZING SOLID, CORROSIVE, N.O.S.
Technical name	diiodine-pentaoxide sulphuric acid
ICAO-TI / IATA	Oxidizing solid, corrosive, n.o.s.
Technical name	diiodine-pentaoxide sulphuric acid

14.3 Transport hazard class(es)

ADR/RID/ADN - Class	5.1
Label	5.1+8
Classification code	OC2
Tunnel restriction code	E
Hazard identification no.	58
IMDG - Class	5.1
Subsidiary Risk	8
Label	5.1+8
ICAO-TI / IATA - Class	5.1
Subrisk	8
Label	5.1+8

14.4 Packing group

ADR/RID/ADN	III
IMDG	III
ICAO-TI / IATA	III

14.5 Environmental hazards

EmS F-A, S-Q

14.6 Special precautions for user
No data available.

14.7 Maritime transport in bulk according to IMO instruments
Not relevant

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)
According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation
According to available data and the information provided by preliminary suppliers, the product does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES				
The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.				
No	**Substance name**	**CAS no.**	**EC no.**	**No**
1	**sulphuric acid**	**7664-93-9**	**231-639-5**	**75**

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances	
This product is subject to Part I of Annex I, risk category:	P8

15.2 Chemical safety assessment
A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information

Further information
Article no. 90270, 100 g

Sources of key data used to compile the data sheet:
Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.
Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.
National Threshold Limit Values of the corresponding countries as amended in each case.
Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Full text of the H- and EUH- phrases drawn up in sections 2 and 3 (provided not already drawn up in these sections)
H318 Causes serious eye damage.

Notes relating to the identification, classification and labelling of substances and mixtures ((EC) No 1272/2008, Annex VI)
B Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: ‘nitric acid … %’. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

Creation of the safety data sheet
UMCO GmbH

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This information is based on our present knowledge and experience.
The safety data sheet describes products with a view to safety requirements.
It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:
Alterations to the previous edition are marked in the left-hand margin.

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