

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/07/2021

Reviewed on 10/07/2021

## 1 Identification

- **Product identifier**
- **Trade name:** SCHIFF'S REAGENT
- **Article number:** 26052-05, 26774-01, 26853-01, 26052-06, 26920-04
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.



GHS05 Corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS05



GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**  
hydrogen chloride  
4,4'-(4-iminocyclohexa-2,5-dienylidene)methylene)dianiline hydrochloride  
sodium metabisulphite
- **Hazard statements**  
Causes severe skin burns and eye damage.  
Suspected of causing cancer.
- **Precautionary statements**  
Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.

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Do not breathe dusts or mists.  
 Wash thoroughly after handling.  
 Wear protective gloves/protective clothing/eye protection/face protection.  
 If swallowed: Rinse mouth. Do NOT induce vomiting.  
 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 Immediately call a poison center/doctor.  
 IF exposed or concerned: Get medical advice/attention.  
 Specific treatment (see on this label).  
 Wash contaminated clothing before reuse.  
 Store locked up.  
 Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

7647-01-0	hydrogen chloride	>2.5-≤10%
7681-57-4	sodium metabisulphite	>2.5-≤10%
569-61-9	4,4'-(4-iminocyclohexa-2,5-dienylidene)methylene)dianiline hydrochloride	≤2.5%

### 4 First-aid measures

- **Description of first aid measures**

- **General information:** Immediately remove any clothing soiled by the product.

- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.

- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

- **After swallowing:** Drink copious amounts of water and provide fresh air. Immediately call a doctor.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed** No further relevant information available.

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- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Mount respiratory protective device.  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralizing agent.  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.
- **Protective Action Criteria for Chemicals**

- **PAC-1:**

7647-01-0	hydrogen chloride	1.8 ppm
7681-57-4	sodium metabisulphite	15 mg/m <sup>3</sup>

- **PAC-2:**

7647-01-0	hydrogen chloride	22 ppm
7681-57-4	sodium metabisulphite	64 mg/m <sup>3</sup>

- **PAC-3:**

7647-01-0	hydrogen chloride	100 ppm
7681-57-4	sodium metabisulphite	390 mg/m <sup>3</sup>

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.

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- **Information about storage in one common storage facility:** Do not store together with acids.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.  
At this time, the remaining constituent has no known exposure limits.

### 7647-01-0 hydrogen chloride

PEL	Ceiling limit value: 7 mg/m <sup>3</sup> , 5 ppm
REL	Ceiling limit value: 7 mg/m <sup>3</sup> , 5 ppm
TLV	Ceiling limit value: 2.98 mg/m <sup>3</sup> , 2 ppm

### 7681-57-4 sodium metabisulphite

REL	Long-term value: 5 mg/m <sup>3</sup>
TLV	Long-term value: 5 mg/m <sup>3</sup>

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing.  
Wash hands before breaks and at the end of work.  
Store protective clothing separately.  
Avoid contact with the eyes.  
Avoid contact with the eyes and skin.
- **Breathing equipment:**  
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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## · Eye protection:



Tightly sealed goggles

## 9 Physical and chemical properties

## · Information on basic physical and chemical properties

## · General Information

## · Appearance:

· Form:	Liquid
· Color:	Clear
· Odor:	Strong
· Odor threshold:	Not determined.

· pH-value at 20 °C (68 °F): 2

## · Change in condition

· Melting point/Melting range:	Undetermined.
· Boiling point/Boiling range:	Undetermined.

· Flash point: Not applicable.

· Flammability (solid, gaseous): Not flammable.

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

## · Explosion limits:

· Lower:	Not determined.
· Upper:	Not determined.

· Vapor pressure at 20 °C (68 °F): 23 hPa (17.3 mm Hg)

· Density: Not determined.

· Relative density: Not determined.

· Vapor density: Not determined.

· Evaporation rate: Not determined.

## · Solubility in / Miscibility with

· Water: Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not determined.

## · Viscosity:

· Dynamic:	Not determined.
· Kinematic:	Not determined.

## · Solvent content:

· Water:	89.0 %
· VOC content:	0.00 %
	0.0 g/l / 0.00 lb/gal

· Solids content: 0.0 %

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· **Other information** No further relevant information available.

## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** Contact with acids releases toxic gases.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Strong caustic effect on skin and mucous membranes.
- **on the eye:**  
Strong caustic effect.  
Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Corrosive  
Irritant  
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.  
Carcinogenic.
- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

7647-01-0	hydrogen chloride	3
569-61-9	4,4'-(4-iminocyclohexa-2,5-dienylidenemethylene)dianiline hydrochloride	2B

- **NTP (National Toxicology Program)**

569-61-9	4,4'-(4-iminocyclohexa-2,5-dienylidenemethylene)dianiline hydrochloride	R
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- **OSHA-Ca (Occupational Safety Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

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- **Additional ecological information:**
- **General notes:**  
*Water hazard class 3 (Self-assessment): extremely hazardous for water  
 Do not allow product to reach ground water, water course or sewage system, even in small quantities.  
 Must not reach bodies of water or drainage ditch undiluted or unneutralized.  
 Danger to drinking water if even extremely small quantities leak into the ground.*
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
*Must not be disposed of together with household garbage. Do not allow product to reach sewage system.*
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

- |   |                                |
|---|--------------------------------|
| <b>· UN-Number</b>  | UN1789                         |
| <b>· DOT, ADR, IMDG, IATA</b>   |                                |
| <b>· UN proper shipping name</b>  | Hydrochloric acid mixture      |
| <b>· DOT</b>  | 1789 HYDROCHLORIC ACID mixture |
| <b>· ADR</b>  | HYDROCHLORIC ACID mixture      |
| <b>· IMDG, IATA</b>   |                                |
| <b>· Transport hazard class(es)</b>   |                                |
| <b>· DOT</b>  |                                |
|  |                                |
| <b>· Class</b>  | 8 Corrosive substances         |
| <b>· Label</b>  | 8                              |
|   |                                |
| <b>· ADR, IMDG, IATA</b>  |                                |
|  |                                |
| <b>· Class</b>  | 8 Corrosive substances         |
| <b>· Label</b>  | 8                              |
| <b>· Packing group</b>  | II                             |
| <b>· DOT, ADR, IMDG, IATA</b>   |                                |
| <b>· Environmental hazards:</b>   | Not applicable.                |
| <b>· Special precautions for user</b>   | Warning: Corrosive substances  |

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· <b>Hazard identification number (Kemler code):</b> 80	
· <b>EMS Number:</b>	F-A,S-B
· <b>Segregation groups</b>	Strong acids
· <b>Stowage Category</b>	C
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>DOT</b>	
· <b>Quantity limitations</b>	On passenger aircraft/rail: 1 L On cargo aircraft only: 30 L
· <b>ADR</b>	
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>UN "Model Regulation":</b>	UN 1789 HYDROCHLORIC ACID MIXTURE, 8, II

## 15 Regulatory information

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

· **Section 355 (extremely hazardous substances):**

7647-01-0 | hydrogen chloride

· **Section 313 (Specific toxic chemical listings):**

7647-01-0 | hydrogen chloride

· **TSCA (Toxic Substances Control Act):**

All components have the value ACTIVE.

· **Hazardous Air Pollutants**

7647-01-0 | hydrogen chloride

· **Proposition 65**

· **Chemicals known to cause cancer:**

569-61-9 | 4,4'-(4-iminocyclohexa-2,5-dienylidenemethylene)dianiline hydrochloride

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

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- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

7647-01-0 hydrogen chloride

A4

7681-57-4 sodium metabisulphite

A4

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS05 GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

hydrogen chloride

4,4'-(4-iminocyclohexa-2,5-dienylidenemethylene)dianiline hydrochloride

sodium metabisulphite

- **Hazard statements**

Causes severe skin burns and eye damage.

Suspected of causing cancer.

- **Precautionary statements**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dusts or mists.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Rinse mouth. Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a poison center/doctor.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- **National regulations:**

- **Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.

Exceptions can be made by the authorities in certain cases.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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### 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **Date of preparation / last revision** 10/07/2021 / -

· **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*

*DOT: US Department of Transportation*

*IATA: International Air Transport Association*

*ACGIH: American Conference of Governmental Industrial Hygienists*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*ELINCS: European List of Notified Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*NFPA: National Fire Protection Association (USA)*

*HMIS: Hazardous Materials Identification System (USA)*

*VOC: Volatile Organic Compounds (USA, EU)*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*NIOSH: National Institute for Occupational Safety*

*OSHA: Occupational Safety **Health***

***TLV: Threshold Limit Value***

***PEL: Permissible Exposure Limit***

***REL: Recommended Exposure Limit***

***Skin Corr. 1B: Skin corrosion/irritation – Category 1B***

***Eye Dam. 1: Serious eye damage/eye irritation – Category 1***

***Carc. 2: Carcinogenicity – Category 2***

# Safety Data Sheet

## according to WHS Regulations

Printing date 07.10.2021

Revision: 07.10.2021

### 1 Identification

- **Product identifier**
- **Trade name:** SCHIFF'S REAGENT
- **Article number:** 26052-05, 26774-01, 26853-01, 26052-06, 26920-04
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- ProSciTech Pty Ltd  
11 Carlton Street, Kirwan QLD 4817 Australia  
Telephone Number: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)  
Emergency Contact: (07) 4773 9444 - 8:30am - 5:00pm, Monday to Friday (excluding Public Holidays)  
Website: ems.proscitech.com
- Emgrid Australia Pty. Ltd.  
P.O. Box 118  
The Patch VIC 3792  
Australia  
Tel: 03 9752 1785  
Fax: 03 9752 1784  
Website: www.emgrid.com.au
- **Further information obtainable from:** Product safety department
- **Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 Hazard(s) Identification

- **Classification of the substance or mixture**



GHS08 health hazard

Carc. 2      H351 Suspected of causing cancer.



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

- **Label elements**

- **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).

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· **Hazard pictograms**

GHS05 GHS08

· **Signal word** *Danger*· **Hazard-determining components of labelling:***hydrogen chloride**4,4'-(4-iminocyclohexa-2,5-dienylidenemethylene)dianiline hydrochloride**sodium metabisulphite*· **Hazard statements***Causes severe skin burns and eye damage.**Suspected of causing cancer.*· **Precautionary statements***Obtain special instructions before use.**Do not handle until all safety precautions have been read and understood.**Do not breathe dusts or mists.**Wash thoroughly after handling.**Wear protective gloves/protective clothing/eye protection/face protection.**IF SWALLOWED: rinse mouth. Do NOT induce vomiting.**IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.**IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.**IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.**Continue rinsing.**Immediately call a POISON CENTER/doctor.**IF exposed or concerned: Get medical advice/attention.**Specific treatment (see on this label).**Wash contaminated clothing before reuse.**Store locked up.**Dispose of contents/container in accordance with local/regional/national/international regulations.*· **Additional information:***Contact with acids liberates toxic gas.*· **Other hazards**· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.

### 3 Composition and Information on Ingredients

· **Chemical characterisation: Mixtures**· **Description:** Mixture of substances listed below with nonhazardous additions.· **Dangerous components:**

7647-01-0	hydrogen chloride	>2.5-≤10%
7681-57-4	sodium metabisulphite	>2.5-≤10%
569-61-9	4,4'-(4-iminocyclohexa-2,5-dienylidenemethylene)dianiline hydrochloride	≤2.5%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

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Trade name: SCHIFF'S REAGENT

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### 4 First Aid Measures

- **Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire Fighting Measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

### 6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures**  
Mount respiratory protective device.  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralising agent.  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and Storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Do not store together with acids.
- **Further information about storage conditions:** Keep container tightly sealed.

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· **Specific end use(s)** No further relevant information available.

### 8 Exposure controls and personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

**7647-01-0 hydrogen chloride**

WES | Peak limitation: 7.5 mg/m<sup>3</sup>, 5 ppm

**7681-57-4 sodium metabisulphite**

WES | Long-term value: 5 mg/m<sup>3</sup>

· **Additional information:** The lists valid during the making were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

AU

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# Safety Data Sheet

## according to WHS Regulations

Printing date 07.10.2021

Revision: 07.10.2021

Trade name: SCHIFF'S REAGENT

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### 9 Physical and Chemical Properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· <b>Form:</b>	Liquid
· <b>Colour:</b>	Clear
· <b>Odour:</b>	Strong
· <b>Odour threshold:</b>	Not determined.

· <b>pH-value at 20 °C:</b>	2
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· **Change in condition**

· <b>Melting point/freezing point:</b>	Undetermined.
· <b>Initial boiling point and boiling range:</b>	Undetermined.

· <b>Flash point:</b>	Not applicable.
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· <b>Flammability (solid, gas):</b>	Not applicable.
-------------------------------------	-----------------

· <b>Decomposition temperature:</b>	Not determined.
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· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
-------------------------------------	------------------------------

· <b>Explosive properties:</b>	Product does not present an explosion hazard.
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· **Explosion limits:**

· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.

· <b>Vapour pressure at 20 °C:</b>	23 hPa
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· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.

· **Solubility in / Miscibility with**

· <b>water:</b>	Not miscible or difficult to mix.
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· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
--	-----------------

· **Viscosity:**

· <b>Dynamic:</b>	Not determined.
· <b>Kinematic:</b>	Not determined.

· **Solvent content:**

· <b>Water:</b>	89.0 %
· <b>VOC (EC)</b>	0.00 %

· <b>Solids content:</b>	0.0 %
· <b>Other information</b>	No further relevant information available.

### 10 Stability and Reactivity

· **Reactivity** No further relevant information available.

· **Chemical stability**

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **Possibility of hazardous reactions** Contact with acids releases toxic gases.

· **Conditions to avoid** No further relevant information available.

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Trade name: SCHIFF'S REAGENT

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- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological Information

- **Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** Strong caustic effect on skin and mucous membranes.
- **Serious eye damage/irritation**  
Strong caustic effect.  
Strong irritant with the danger of severe eye injury.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Corrosive  
Irritant  
Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.  
Carcinogenic.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**  
Carc. 2

### 12 Ecological Information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water  
Do not allow product to reach ground water, water course or sewage system, even in small quantities.  
Must not reach sewage water or drainage ditch undiluted or unneutralised.  
Danger to drinking water if even extremely small quantities leak into the ground.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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# Safety Data Sheet

according to WHS Regulations

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Trade name: SCHIFF'S REAGENT

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- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

<ul style="list-style-type: none"> <li>· <b>UN-Number</b></li> <li>· <b>ADG, IMDG, IATA</b></li> </ul>	<p style="text-align: right;">UN1789</p>
<ul style="list-style-type: none"> <li>· <b>UN proper shipping name</b></li> <li>· <b>ADG</b></li> <li>· <b>IMDG, IATA</b></li> </ul>	<p style="text-align: right;">1789 HYDROCHLORIC ACID mixture HYDROCHLORIC ACID mixture</p>
<ul style="list-style-type: none"> <li>· <b>Transport hazard class(es)</b></li> <li>· <b>ADG, IMDG, IATA</b></li> </ul>	<div style="text-align: center;">  </div> <p style="text-align: right;">8 Corrosive substances. 8</p>
<ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>	<p style="text-align: right;">8 Corrosive substances. 8</p>
<ul style="list-style-type: none"> <li>· <b>Packing group</b></li> <li>· <b>ADG, IMDG, IATA</b></li> </ul>	<p style="text-align: right;">II</p>
<ul style="list-style-type: none"> <li>· <b>Environmental hazards:</b></li> </ul>	<p style="text-align: right;">Not applicable.</p>
<ul style="list-style-type: none"> <li>· <b>Special precautions for user</b></li> <li>· <b>Hazard identification number (Kemler code):</b></li> <li>· <b>EMS Number:</b></li> <li>· <b>Segregation groups</b></li> <li>· <b>Stowage Category</b></li> </ul>	<p style="text-align: right;">Warning: Corrosive substances. 80 F-A,S-B Strong acids C</p>
<ul style="list-style-type: none"> <li>· <b>Transport in bulk according to Annex II of Marpol and the IBC Code</b></li> </ul>	<p style="text-align: right;">Not applicable.</p>
<ul style="list-style-type: none"> <li>· <b>Transport/Additional information:</b></li> </ul>	
<ul style="list-style-type: none"> <li>· <b>ADG</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul>	<p style="text-align: right;">1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml</p>
<ul style="list-style-type: none"> <li>· <b>Transport category</b></li> <li>· <b>Tunnel restriction code</b></li> </ul>	<p style="text-align: right;">2 E</p>
<ul style="list-style-type: none"> <li>· <b>IMDG</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul>	<p style="text-align: right;">1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml</p>
<ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>	<p style="text-align: right;">UN 1789 HYDROCHLORIC ACID MIXTURE, 8, II</p>

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Trade name: **SCHIFF'S REAGENT**

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### 15 Regulatory information

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

· **Australian Inventory of Industrial Chemicals**

7732-18-5	Deionized Water, Reagent Grade A.C.S.
7647-01-0	hydrogen chloride
7681-57-4	sodium metabisulphite

· **Standard for the Uniform Scheduling of Medicines and Poisons**

7647-01-0	hydrogen chloride	S5, S6
7681-57-4	sodium metabisulphite	S5

· **Australia: Priority Existing Chemicals**

None of the ingredients is listed.

· **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).

· **Hazard pictograms**



GHS05    GHS08

· **Signal word** *Danger*

· **Hazard-determining components of labelling:**

hydrogen chloride

4,4'-(4-iminocyclohexa-2,5-dienylidenemethylene)dianiline hydrochloride

sodium metabisulphite

· **Hazard statements**

Causes severe skin burns and eye damage.

Suspected of causing cancer.

· **Precautionary statements**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Do not breathe dusts or mists.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a POISON CENTER/doctor.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

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**Trade name: SCHIFF'S REAGENT**

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**· National regulations:****· Information about limitation of use:**

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

**· Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

**· 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

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Carc. 2: Carcinogenicity – Category 2

AU

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 10/07/2021

Reviewed on 10/07/2021

### 1 Identification

- **Product identifier**
- **Trade name:** SCHIFF'S REAGENT
- **Article number:** 26052-05, 26774-01, 26853-01, 26052-06, 26920-04
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
 Electron Microscopy Sciences  
 1560 Industry Road  
 USA-Hatfield, PA 19440  
 Tel: 215-412-8400 Fax: 215-412-8450  
 email: sgkcck@aol.com  
 www.emsdiasum.com
- **Information department:** Product safety department
- **Emergency telephone number:**  
 ChemTrec 1-800-424-9300 Contract CCN7661  
 1-703-527-3887

### 2 Hazard identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Carcinogenicity – Category 2      H351 Suspected of causing cancer.



GHS05 Corrosion

Skin Corrosion - Category 1B      H314 Causes severe skin burns and eye damage.

Serious Eye Damage - Category 1      H318 Causes serious eye damage.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS05



GHS08

- **Signal word** Danger
- **Hazard-determining components of labeling:**  
 hydrogen chloride  
 4,4'-(4-iminocyclohexa-2,5-dienylidene)methylene)dianiline hydrochloride  
 sodium metabisulphite
- **Hazard statements**  
 Causes severe skin burns and eye damage.  
 Suspected of causing cancer.
- **Precautionary statements**  
 Obtain special instructions before use.  
 Do not handle until all safety precautions have been read and understood.

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# Safety Data Sheet

## according to HPR, Schedule 1

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**Trade name: SCHIFF'S REAGENT**

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Do not breathe dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a poison center/doctor.

IF exposed or concerned: Get medical advice/attention.

Specific treatment (see on this label).

Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



Health = 3

Fire = 0

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = \*3

Fire = 0

Reactivity = 0

### 3 Composition/Information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

7647-01-0	hydrogen chloride	1-5% w/w *
7681-57-4	sodium metabisulphite	1-5% w/w *
569-61-9	4,4'-(4-iminocyclohexa-2,5-dienylidenemethylene)dianiline hydrochloride	0.1-1% w/w *

\* Actual concentration ranges are withheld as a trade secret.

### 4 First-aid measures

· **Description of first aid measures**

· **General information:** Immediately remove any clothing soiled by the product.

· **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.

· **After swallowing:** Drink copious amounts of water and provide fresh air. Immediately call a doctor.

· **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

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# Safety Data Sheet

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**Trade name: SCHIFF'S REAGENT**

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- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Mount respiratory protective device.  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralizing agent.  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** Keep respiratory protective device available.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Do not store together with acids.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

### 8 Exposure controls/ Personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

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Trade name: **SCHIFF'S REAGENT**

(Contd. of page 3)

- **Control parameters**

· <b>Components with limit values that require monitoring at the workplace:</b>	
<b>7647-01-0 hydrogen chloride</b>	
EL	Ceiling: 2 ppm
EV	Ceiling: 2 ppm
<b>7681-57-4 sodium metabisulphite</b>	
EL	TWA: 5 mg/m <sup>3</sup>
EV	TWA: 5 mg/m <sup>3</sup>

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.  
 Immediately remove all soiled and contaminated clothing.  
 Wash hands before breaks and at the end of work.  
 Store protective clothing separately.  
 Avoid contact with the eyes.  
 Avoid contact with the eyes and skin.

- **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
 Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

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# Safety Data Sheet

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Reviewed on 10/07/2021

Trade name: SCHIFF'S REAGENT

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### 9 Physical and chemical properties

· <b>Information on basic physical and chemical properties</b>	
· <b>General Information</b>	
· <b>Appearance:</b>	
· <b>Form:</b>	Liquid
· <b>Color:</b>	Clear
· <b>Odor:</b>	Strong
· <b>Odor threshold:</b>	Not determined.
· <b>pH-value at 20 °C:</b>	2
· <b>Change in condition</b>	
· <b>Melting point/Melting range:</b>	Undetermined.
· <b>Boiling point/Boiling range:</b>	Undetermined.
· <b>Flash point:</b>	Not applicable.
· <b>Flammability (solid, gaseous):</b>	Not flammable.
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.
· <b>Vapor pressure at 20 °C:</b>	23 hPa
· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with</b>	
· <b>Water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient (n-octanol/water):</b> Not determined.	
· <b>Viscosity:</b>	
· <b>Dynamic:</b>	Not determined.
· <b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
· <b>Water:</b>	89.0 %
· <b>Solids content:</b> 0.0 %	
· <b>Other information</b>	No further relevant information available.

### 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** Contact with acids releases toxic gases.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.

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# Safety Data Sheet

## according to HPR, Schedule 1

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· **Hazardous decomposition products:** No dangerous decomposition products known.

### 11 Toxicological information

· **Information on toxicological effects**· **Acute toxicity:**· **Primary irritant effect:**· **on the skin:** Strong caustic effect on skin and mucous membranes.· **on the eye:**

Strong caustic effect.

Strong irritant with the danger of severe eye injury.

· **Sensitization:** No sensitizing effects known.· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

Carcinogenic.

· **Carcinogenic categories**· **IARC (International Agency for Research on Cancer)**

7647-01-0	hydrogen chloride	3
569-61-9	4,4'-(4-iminocyclohexa-2,5-dienylidenemethylene)dianiline hydrochloride	2B

· **NTP (National Toxicology Program)**

569-61-9	4,4'-(4-iminocyclohexa-2,5-dienylidenemethylene)dianiline hydrochloride	R
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### 12 Ecological information

· **Toxicity**· **Aquatic toxicity:** No further relevant information available.· **Persistence and degradability** No further relevant information available.· **Behavior in environmental systems:**· **Bioaccumulative potential** No further relevant information available.· **Mobility in soil** No further relevant information available.· **Additional ecological information:**· **General notes:**

Water hazard class 3 (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

Danger to drinking water if even extremely small quantities leak into the ground.

· **Results of PBT and vPvB assessment**· **PBT:** Not applicable.· **vPvB:** Not applicable.· **Other adverse effects** No further relevant information available.

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# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 10/07/2021

Reviewed on 10/07/2021



Trade name: SCHIFF'S REAGENT

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### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

· <b>UN-Number</b>	
· <b>DOT/TDG, ADR, IMDG, IATA</b>	UN1789
· <b>UN proper shipping name</b>	
· <b>DOT/TDG</b>	Hydrochloric acid mixture
· <b>ADR</b>	1789 HYDROCHLORIC ACID mixture
· <b>IMDG, IATA</b>	HYDROCHLORIC ACID mixture
· <b>Transport hazard class(es)</b>	
· <b>DOT/TDG (Transport dangerous goods):</b>	
	
· <b>Class</b>	8 Corrosive substances
· <b>Label</b>	8
· <b>ADR, IMDG, IATA</b>	
	
· <b>Class</b>	8 Corrosive substances
· <b>Label</b>	8
· <b>Packing group</b>	
· <b>DOT/TDG, ADR, IMDG, IATA</b>	II
· <b>Environmental hazards:</b>	Not applicable.
· <b>Special precautions for user</b>	Warning: Corrosive substances
· <b>Hazard identification number (Kemler code):</b>	80
· <b>EMS Number:</b>	F-A,S-B
· <b>Segregation groups</b>	Strong acids
· <b>Stowage Category</b>	C
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>DOT/TDG</b>	
· <b>Quantity limitations</b>	On passenger aircraft/rail: 1 L On cargo aircraft only: 30 L

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Trade name: SCHIFF'S REAGENT

(Contd. of page 7)

· <b>ADR</b>	
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
<hr/>	
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>UN "Model Regulation":</b>	UN 1789 HYDROCHLORIC ACID MIXTURE, 8, II

## 15 Regulatory information

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

- **Section 355 (extremely hazardous substances):**

7647-01-0	hydrogen chloride
-----------	-------------------

- **Section 313 (Specific toxic chemical listings):**

7647-01-0	hydrogen chloride
-----------	-------------------

- **TSCA (Toxic Substances Control Act):**

All components have the value ACTIVE.
---------------------------------------

- **Canadian substance listings:**

- **Canadian Domestic Substances List (DSL)**

7732-18-5	Deionized Water, Reagent Grade A.C.S.
-----------	---------------------------------------

7647-01-0	hydrogen chloride
-----------	-------------------

7681-57-4	sodium metabisulphite
-----------	-----------------------

- **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.
------------------------------------

- **Canadian Ingredient Disclosure list (limit 1%)**

7647-01-0	hydrogen chloride
-----------	-------------------

7681-57-4	sodium metabisulphite
-----------	-----------------------

569-61-9	4,4'-(4-iminocyclohexa-2,5-dienylidenemethylene)dianiline hydrochloride
----------	---

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS05 GHS08

- **Signal word** Danger

- **Hazard-determining components of labeling:**

hydrogen chloride

4,4'-(4-iminocyclohexa-2,5-dienylidenemethylene)dianiline hydrochloride

sodium metabisulphite

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CA

# Safety Data Sheet

## according to HPR, Schedule 1

Printing date 10/07/2021

Reviewed on 10/07/2021

**Trade name: SCHIFF'S REAGENT**

(Contd. of page 8)

· **Hazard statements**

*Causes severe skin burns and eye damage.*  
*Suspected of causing cancer.*

· **Precautionary statements**

*Obtain special instructions before use.*  
*Do not handle until all safety precautions have been read and understood.*  
*Do not breathe dust/fume/gas/mist/vapours/spray.*  
*Wash thoroughly after handling.*  
*Wear protective gloves/protective clothing/eye protection/face protection.*  
*IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.*  
*IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].*  
*IF INHALED: Remove person to fresh air and keep comfortable for breathing.*  
*IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.*  
*Continue rinsing.*  
*Immediately call a poison center/doctor.*  
*IF exposed or concerned: Get medical advice/attention.*  
*Specific treatment (see on this label).*  
*Wash contaminated clothing before reuse.*  
*Store locked up.*  
*Dispose of contents/container in accordance with local/regional/national/international regulations.*

· **National regulations:**

· **Information about limitation of use:**

*Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.*  
*Exceptions can be made by the authorities in certain cases.*

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### 16 Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **Date of the latest revision of the safety data sheet** 10/07/2021 / -

· **Abbreviations and acronyms:**

*IMDG: International Maritime Code for Dangerous Goods*  
*DOT: US Department of Transportation*  
*IATA: International Air Transport Association*  
*EINECS: European Inventory of Existing Commercial Chemical Substances*  
*ELINCS: European List of Notified Chemical Substances*  
*CAS: Chemical Abstracts Service (division of the American Chemical Society)*  
*NFPA: National Fire Protection Association (USA)*  
*HMIS: Hazardous Materials Identification System (USA)*  
*PBT: Persistent, Bioaccumulative and Toxic*  
*vPvB: very Persistent and very Bioaccumulative*

CA

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 07.10.2021

Revision: 07.10.2021

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

- **1.1 Product identifier**
- **Trade name:** SCHIFF'S REAGENT
- **Article number:** 26052-05, 26774-01, 26853-01, 26052-06, 26920-04
- **UFI:** XAY0-U0E6-5008-AJA5
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Further information obtainable from:** Product safety department
- **1.4 Emergency telephone number:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS08 health hazard

Carc. 1B H350 May cause cancer.



GHS05 corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS05



GHS08

- **Signal word** *Danger*
- **Hazard-determining components of labelling:**  
hydrogen chloride  
4,4'-(4-iminocyclohexa-2,5-dienylidenemethylene)dianiline hydrochloride  
sodium metabisulphite

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GB

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 07.10.2021

Revision: 07.10.2021

**Trade name: SCHIFF'S REAGENT**

(Contd. of page 1)

**· Hazard statements**

H314 Causes severe skin burns and eye damage.

H350 May cause cancer.

**· Precautionary statements**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.

P321 Specific treatment (see on this label).

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

**· Additional information:**

EUH031 Contact with acids liberates toxic gas.

**· 2.3 Other hazards****· Results of PBT and vPvB assessment****· PBT:** Not applicable.**· vPvB:** Not applicable.**SECTION 3: Composition/information on ingredients****· 3.2 Chemical characterisation: Mixtures****· Description:** Mixture of substances listed below with nonhazardous additions.**· Dangerous components:**

CAS: 7647-01-0 EINECS: 231-595-7	hydrogen chloride ⚠ Skin Corr. 1B, H314; Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; STOT SE 3, H335	>2.5-≤10%
CAS: 7681-57-4 EINECS: 231-673-0	sodium metabisulphite ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302	>2.5-≤10%
CAS: 569-61-9 EINECS: 209-321-2	4,4'-(4-iminocyclohexa-2,5-dienylidene)methylene)dianiline hydrochloride ⚠ Carc. 1B, H350	≤2.5%

**· Additional information:** For the wording of the listed hazard phrases refer to section 16.**SECTION 4: First aid measures****· 4.1 Description of first aid measures****· General information:** Immediately remove any clothing soiled by the product.**· After inhalation:** In case of unconsciousness place patient stably in side position for transportation.**· After skin contact:** Immediately wash with water and soap and rinse thoroughly.**· After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.**· After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.**· 4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.**· 4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

**SECTION 5: Firefighting measures****· 5.1 Extinguishing media****· Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

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**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 07.10.2021

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Trade name: SCHIFF'S REAGENT

(Contd. of page 2)

- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Mount respiratory protective device.  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralising agent.  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle receptacle with care.  
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Do not store together with acids.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

#### 7647-01-0 hydrogen chloride

WEL	Short-term value: 8 mg/m <sup>3</sup> , 5 ppm Long-term value: 2 mg/m <sup>3</sup> , 1 ppm (gas and aerosol mists)
-----	--

#### 7681-57-4 sodium metabisulphite

WEL	Long-term value: 5 mg/m <sup>3</sup>
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- **Additional information:** The lists valid during the making were used as basis.

(Contd. on page 4)

GB

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 07.10.2021

Revision: 07.10.2021

**Trade name: SCHIFF'S REAGENT**

(Contd. of page 3)

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

## SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

- |                           |                 |
|---------------------------|-----------------|
| · <b>Form:</b>            | Liquid          |
| · <b>Colour:</b>          | Clear           |
| · <b>Odour:</b>           | Strong          |
| · <b>Odour threshold:</b> | Not determined. |

· <b>pH-value at 20 °C:</b>	2
-----------------------------	---

· **Change in condition**

- |   |               |
|---|---------------|
| · <b>Melting point/freezing point:</b>            | Undetermined. |
| · <b>Initial boiling point and boiling range:</b> | Undetermined. |

· <b>Flash point:</b>	Not applicable.
-----------------------	-----------------

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**Trade name: SCHIFF'S REAGENT**

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· <b>Flammability (solid, gas):</b>	Not applicable.
· <b>Decomposition temperature:</b>	Not determined.
· <b>Auto-ignition temperature:</b>	Product is not selfigniting.
· <b>Explosive properties:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.
· <b>Vapour pressure at 20 °C:</b>	23 hPa
· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient: n-octanol/water:</b>	Not determined.
· <b>Viscosity:</b>	
· <b>Dynamic:</b>	Not determined.
· <b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
· <b>Water:</b>	89.0 %
· <b>VOC (EC)</b>	0.00 %
· <b>Solids content:</b>	0.0 %
· <b>9.2 Other information</b>	No further relevant information available.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** Contact with acids releases toxic gases.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation**  
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation**  
Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

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GB

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 07.10.2021

Revision: 07.10.2021

Trade name: SCHIFF'S REAGENT

(Contd. of page 5)

- **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity**  
May cause cancer.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 3 (German Regulation) (Self-assessment): extremely hazardous for water  
Do not allow product to reach ground water, water course or sewage system, even in small quantities.  
Must not reach sewage water or drainage ditch undiluted or unneutralised.  
Danger to drinking water if even extremely small quantities leak into the ground.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

### SECTION 14: Transport information

- |                                       |                                |
|---------------------------------------|--------------------------------|
| · <b>14.1 UN-Number</b>               |                                |
| · <b>ADR, IMDG, IATA</b>              | UN1789                         |
| · <b>14.2 UN proper shipping name</b> |                                |
| · <b>ADR</b>                          | 1789 HYDROCHLORIC ACID mixture |
| · <b>IMDG, IATA</b>                   | HYDROCHLORIC ACID mixture      |

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GB

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 07.10.2021

Revision: 07.10.2021

**Trade name: SCHIFF'S REAGENT**

(Contd. of page 6)

## · 14.3 Transport hazard class(es)

· ADR, IMDG, IATA



· Class 8 Corrosive substances.  
· Label 8

## · 14.4 Packing group

· ADR, IMDG, IATA II

· 14.5 Environmental hazards: Not applicable.

## · 14.6 Special precautions for user

Warning: Corrosive substances.  
· Hazard identification number (Kemler code): 80  
· EMS Number: F-A,S-B  
· Segregation groups Strong acids  
· Stowage Category C

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

Not applicable.

## · Transport/Additional information:

## · ADR

· Limited quantities (LQ) 1L  
· Excepted quantities (EQ) Code: E2  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 500 ml  
· Transport category 2  
· Tunnel restriction code E

## · IMDG

· Limited quantities (LQ) 1L  
· Excepted quantities (EQ) Code: E2  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 500 ml

## · UN "Model Regulation":

UN 1789 HYDROCHLORIC ACID MIXTURE, 8, II

### SECTION 15: Regulatory information

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

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I None of the ingredients is listed.

· REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 72

· DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

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GB

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 07.10.2021

Revision: 07.10.2021

Trade name: **SCHIFF'S REAGENT**

(Contd. of page 7)

· **National regulations:**· **Information about limitation of use:**

*Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.*

· **15.2 Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

### SECTION 16: Other information

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **Relevant phrases**

*H302 Harmful if swallowed.*

*H314 Causes severe skin burns and eye damage.*

*H318 Causes serious eye damage.*

*H335 May cause respiratory irritation.*

*H350 May cause cancer.*

· **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 Harmonised System of Classification and Labelling of Chemicals*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*ELINCS: European List of Notified Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*VOC: Volatile Organic Compounds (USA, EU)*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*Acute Tox. 4: Acute toxicity - oral – Category 4*

*Skin Corr. 1B: Skin corrosion/irritation – Category 1B*

*Eye Dam. 1: Serious eye damage/eye irritation – Category 1*

*Carc. 1B: Carcinogenicity – Category 1B*

*STOT SE 3: Specific target organ toxicity (single exposure) – Category 3*

GB

# Sikkerhedsdatablad

ifølge 1907/2006/EF, Artikel 31

Trykdato: 07.10.2021

Revision: 07.10.2021

## PUNKT 1: Identifikation af stoffet/blandingen og af selskabet/virksomheden

- **1.1 Produktidentifikator**
- **Handelsnavn:** SCHIFF'S REAGENT
- **Artikelnummer:** 26052-05, 26774-01, 26853-01, 26052-06, 26920-04
- **UFI:** XAY0-U0E6-5008-AJA5
- **1.2 Relevante identificerede anvendelser for stoffet eller blandingen samt anvendelser, der frarådes**  
Der står ingen yderligere, relevante informationer til rådighed.
- **Stoffets/præparatets anvendelse** Laboratoriekemikalier
- **1.3 Nærmere oplysninger om leverandøren af sikkerhedsdatabladet**
- **Producent/leverandør**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **For yderligere information:** Product safety department
- **1.4 Nødtelefon:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## PUNKT 2: Fareidentifikation

- **2.1 Klassificering af stoffet eller blandingen**
- **Klassificering i henhold til forordning (EF) nr. 1272/2008**



GHS08 sundhedsfarer

Carc. 1B H350 Kan fremkalde kræft.



GHS05 ætsning

Skin Corr. 1B H314 Forårsager svære ætsninger af huden og øjenskader.

Eye Dam. 1 H318 Forårsager alvorlig øjenskade.

- **2.2 Mærkningselementer**
- **Mærkning i henhold til forordning (EF) nr. 1272/2008**  
Dette produkt er klassificeret og mærket iht. CLP-forordningen.
- **Farepiktogrammer**



GHS05



GHS08

- **Signalord** Fare
- **Farebestemmende komponent(er) til etikettering:**  
hydrogenchlorid  
4,4'-(4-iminocyclohexa-2,5-dienylidenmetylen)dianilinhydrochlorid  
dinatriumdisulfit

(Fortsættes på side 2)

DK

# Sikkerhedsdatablad

## ifølge 1907/2006/EF, Artikel 31

Trykdato: 07.10.2021

Revision: 07.10.2021

**Handelsnavn: SCHIFF'S REAGENT**

(Fortsat fra side 1)

- **Faresætninger**

H314 Forårsager svære ætsninger af huden og øjenskader.  
H350 Kan fremkalde kræft.

- **Sikkerhedssætninger**

P303+P361+P353 VED KONTAKT MED HUDEN (eller håret): Tilsmudset tøj tages straks affjernes. Skyl [eller brus] huden med vand.

P305+P351+P338 VED KONTAKT MED ØJNENE: Skyl forsigtigt med vand i flere minutter. Fjern eventuelle kontaktlinser, hvis dette kan gøres let. Fortsæt skylning.

P310 Ring omgående til en GIFTINFORMATION/læge.

P321 Særlig behandling (se på denne etiket).

P405 Opbevares under lås.

P501 Bortskaffelse af indholdet/beholderen i henhold til de lokale/regionale/nationale/internationale forskrifter.

- **Yderligere oplysninger:**

EUH031 Udvikler giftig gas ved kontakt med syre.

- **2.3 Andre farer**

- **Resultater af PBT- og vPvB-vurdering**

- **PBT:** Ikke relevant.

- **vPvB:** Ikke relevant.

### PUNKT 3: Sammensætning af/oplysning om indholdsstoffer

- **3.2 Kemisk betegnelse: Blandinger**

- **Beskrivelse:** Blanding med nedenstående stoffer med ufarlige tilsætningsstoffer.

- **Farlige indholdsstoffer:**

CAS: 7647-01-0 EINECS: 231-595-7	hydrogenchlorid ⚠ Skin Corr. 1B, H314; ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; STOT SE 3, H335	>2,5-≤10%
CAS: 7681-57-4 EINECS: 231-673-0	dinatriumdisulfit ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302	>2,5-≤10%
CAS: 569-61-9 EINECS: 209-321-2	4,4'-(4-iminocyclohexa-2,5-dienylidenmetylen)dianilinhydrochlorid ⚠ Carc. 1B, H350	≤2,5%

- **Yderligere anvisninger:** Teksten til de anførte farehenvisninger fremgår af kapitel 16.

### PUNKT 4: Førstehjælpsforanstaltninger

- **4.1 Beskrivelse af førstehjælpsforanstaltninger**

- **Generelle anvisninger:** Tøj, der er forurenet med produktet, skal tages af med det samme.

- **Efter indånding:** I tilfælde af bevidstløshed skal den tilskadekomne lægges ned og transporteres i stabilt sideleje.

- **Efter hudkontakt:** Skal omgående vaskes af med vand og sæbe, skyl godt efter.

- **Efter øjenkontakt:** Skyl øjnene med åbent øjenlåg i flere minutter under rindende vand og søg læge.

- **Efter indtagelse:** Drik rigeligt vand og sørg for frisk luft. Tilkald omgående læge.

- **4.2 Vigtigste symptomer og virkninger, både akutte og forsinkede**

Der står ingen yderligere, relevante informationer til rådighed.

- **4.3 Angivelse af om øjeblikkelig lægehjælp og særlig behandling er nødvendig**

Der står ingen yderligere, relevante informationer til rådighed.

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### PUNKT 5: Brandbekæmpelse

- **5.1 Slukningsmidler**
- **Egnede slukningsmidler:** Tilpas foranstaltningerne til brandbekæmpelse efter omgivelserne.
- **5.2 Særlige farer i forbindelse med stoffet eller blandingen**  
Der står ingen yderligere, relevante informationer til rådighed.
- **5.3 Anvisninger for brandmandskab**
- **Særlige værnemidler:** Bær åndedrætsværn.

### PUNKT 6: Forholdsregler over for udslip ved uheld

- **6.1 Personlige sikkerhedsforanstaltninger, personlige værnemidler og nødprocedurer**  
Bær åndedrætsværn.  
Bær beskyttelsesudstyr. Hold ubeskyttede personer borte.
- **6.2 Miljøbeskyttelsesforanstaltninger:** Må ikke udledes i kloaksystemet/overfladevand/grundvand.
- **6.3 Metoder og udstyr til inddæmning og oprensning:**  
Opsamles med væskebindende materiale (sand, kiselgur, syrebindemiddel, universalbindemiddel, savsmuld).  
Brug neutraliseringsmiddel.  
Kontamineret materiale skal bortskaffes som affald ifølge punkt 13.  
Sørg for tilstrækkelig udluftning.
- **6.4 Henvisning til andre punkter**  
Information om sikker håndtering se kapitel 7.  
Informationer vedrørende personlige værnemidler se kapitel 8.  
Informationer om bortskaffelse se kapitel 13.

### PUNKT 7: Håndtering og opbevaring

- **7.1 Forholdsregler for sikker håndtering**  
Sørg for god udluftning/udsugning på arbejdspladsen.  
Beholdere skal åbnes og håndteres med forsigtighed.  
Undgå aerosoldannelse.
- **Anvisninger vedrørende brand- og eksplosionsbeskyttelse:** Hold åndedrætsværn i beredskab.
- **7.2 Betingelser for sikker opbevaring, herunder eventuel uforenelighed**
- **Opbevaring:**
- **Krav til opbevaringsrum og beholdere:** Ingen særlige krav.
- **Henvisninger vedrørende opbevaring med andre stoffer:** Må ikke opbevares sammen med syrer.
- **Yderligere oplysninger vedrørende opbevaringsbetingelserne:** Hold beholderen tætsluttende lukket.
- **7.3 Særlige anvendelser** Der står ingen yderligere, relevante informationer til rådighed.

### PUNKT 8: Eksponeringskontrol/personlige værnemidler

- **Yderligere anvisninger vedrørende udformning af tekniske anlæg:** Ingen yderligere oplysninger, se punkt 7.
- **8.1 Kontrolparametre**

· **Indholdsstoffer med arbejdspladsrelaterede grænseværdier, der skal overvåges:**

7647-01-0 hydrogenchlorid

GV	Loftværdi: 8 mg/m <sup>3</sup> , 5 ppm
EL	

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**7681-57-4 dinatriumdisulfit**GV Langtidsværdi: 5 mg/m<sup>3</sup>

· **Yderligere anvisninger:** Baseret på de lister, der var gældende på tidspunktet for udarbejdelsen.

· **8.2 Eksponeringskontrol**

· **Personlige værnemidler:**

· **Generelle forholdsregler vedrørende beskyttelse og hygiejne:**

Skal holdes borte fra føde- og drikkevarer og foderstoffer.

Forurenet, gennemvædet tøj skal det tages af med det samme.

Vask hænder inden der holdes pause og ved arbejdsophør.

Adskilt opbevaring af beskyttelsesklædning.

Undgå kontakt med øjnene.

Undgå kontakt med øjne og hud.

· **Åndedrætsværn:**

Ved kortvarig eller ringe belastning skal der benyttes åndedrætsværn med filter, ved intensiv eller længere eksponering skal der benyttes luftforsynet åndedrætsværn.

· **Håndbeskyttelse:**



Beskyttelseshandsker

Handskematerialet skal være uigennemtrængeligt og kunne tåle produktet/stoffet/præparatet.

På grund af manglende tests kan der ikke anbefales noget handskemateriale til produktet/præparatet/kemikalieblandingen.

Ved valg af handskematerialet skal der tages højde for gennemtrængningstider, permeabilitetstal og nedbrydning.

· **Handskemateriale:**

Valg af en egnet handske afhænger ikke blot af materialet, men også af yderligere kvalitetskriterier og er forskelligt fra den ene fabrikant til den anden. Da produktet er et præparat af flere forskellige stoffer, kan handskematerialernes bestandighed ikke beregnes på forhånd og skal derfor efterprøves inden brugen.

· **Handskematerialets gennemtrængningstid**

Hos handskefabrikanten skal man forespørge om den nøjagtige gennemtrængningstid og overholde denne.

· **Øjenbeskyttelse:**



Tætsluttende beskyttelsesbriller

## PUNKT 9: Fysiske og kemiske egenskaber

· **9.1 Oplysninger om grundlæggende fysiske og kemiske egenskaber**

· **Generelle oplysninger**

· **Udseende:**

· **Form:**

Væske

· **Farve:**

Klar

· **Lugt:**

Kraftig

· **Lugttærskel:**

Ikke bestemt.

· **pH-værdi ved 20 °C:**

2

· **Tilstandsændring**

· **Smeltepunkt/frysepunkt:**

Ikke bestemt.

· **Begyndelseskogepunkt og kogepunktsinterval:** Ikke bestemt.

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· <b>Flammepunkt:</b>	Ikke relevant.
· <b>Antændelighed (fast stof, luftart):</b>	Ikke relevant.
· <b>Dekomponeringstemperatur:</b>	Ikke bestemt.
· <b>Selvantændelsestemperatur:</b>	Produktet er ikke selvantændeligt.
· <b>Eksplorative egenskaber:</b>	Produktet er ikke eksplosivt.
· <b>Eksplisionsgrænser:</b>	
· <b>Nedre:</b>	Ikke bestemt.
· <b>Øvre:</b>	Ikke bestemt.
· <b>Damptryk ved 20 °C:</b>	23 hPa
· <b>Densitet:</b>	Ikke bestemt.
· <b>Relativ massefylde:</b>	Ikke bestemt.
· <b>Dampmassefylde:</b>	Ikke bestemt.
· <b>Fordampningshastighed</b>	Ikke bestemt.
· <b>Opløselighed i/blandbarhed med vand:</b>	Ikke eller kun lidt blandbar.
· <b>Fordelingskoefficient: n-oktanol/vand:</b>	Ikke bestemt.
· <b>Viskositet:</b>	
· <b>dynamisk:</b>	Ikke bestemt.
· <b>kinematisk:</b>	Ikke bestemt.
· <b>Opløsningsmiddelindhold:</b>	
· <b>Vand</b>	89,0 %
· <b>VOC (EU)</b>	0,00 %
· <b>Tørstofindhold:</b>	0,0 %
· <b>9.2 Andre oplysninger</b>	Der står ingen yderligere, relevante informationer til rådighed.

## PUNKT 10: Stabilitet og reaktivitet

- **10.1 Reaktivitet** Der står ingen yderligere, relevante informationer til rådighed.
- **10.2 Kemisk stabilitet**
- **Termisk nedbrydning/forhold, der bør undgås** Ingen nedbrydning ved formålsbestemt brug.
- **10.3 Risiko for farlige reaktioner** Kontakt med syrer frigiver giftige gasser.
- **10.4 Forhold, der skal undgås** Der står ingen yderligere, relevante informationer til rådighed.
- **10.5 Materialer, der skal undgås:** Der står ingen yderligere, relevante informationer til rådighed.
- **10.6 Farlige nedbrydningsprodukter:** Der er ikke kendskab til nogen farlige nedbrydningsprodukter.

## PUNKT 11: Toksikologiske oplysninger

- **11.1 Oplysninger om toksikologiske virkninger**
- **Akut toksicitet**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Primær irritationsvirkning:**
- **Hudætsning/-irritation**  
Forårsager svære ætsninger af huden og øjenskader.
- **Alvorlig øjenskade/øjenirritation**  
Forårsager alvorlig øjenskade.

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- **Respiratorisk sensibilisering eller hudsensibilisering**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **CMR-virkninger (kræftfremkaldende egenskaber, mutagenicitet og reproduktionstoksicitet)**
- **Kimcellemutagenicitet**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Kræftfremkaldende egenskaber**  
Kan fremkalde kræft.
- **Reproduktionstoksicitet**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Enkel STOT-eksponering**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Gentagne STOT-eksponeringer**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.
- **Aspirationsfare**  
Kriterierne for klassificering kan på grundlag af de foreliggende data ikke anses for at være opfyldt.

### PUNKT 12: Miljøoplysninger

- **12.1 Toksicitet**
- **Toksicitet i vand:** Der står ingen yderligere, relevante informationer til rådighed.
- **12.2 Persistens og nedbrydelighed** Der står ingen yderligere, relevante informationer til rådighed.
- **12.3 Bioakkumuleringspotentiale** Der står ingen yderligere, relevante informationer til rådighed.
- **12.4 Mobilitet i jord** Der står ingen yderligere, relevante informationer til rådighed.
- **Yderligere økologiske oplysninger:**
- **Generelle anvisninger:**  
Fareklasse for vand 3 (Selvklassificering): stærkt vandforurenende  
Må ikke udledes i grundvandet, vandløb eller kloaksystemet, heller ikke i små mængder.  
Må ikke udledes ufortyndet eller unneutraliseret i spildevandet eller recipienten.  
Risiko for forurening af drikkevandet allerede ved udslip af ganske små mængder i undergrunden.
- **12.5 Resultater af PBT- og vPvB-vurdering**
- **PBT:** Ikke relevant.
- **vPvB:** Ikke relevant.
- **12.6 Andre negative virkninger** Der står ingen yderligere, relevante informationer til rådighed.

### PUNKT 13: Bortskaffelse

- **13.1 Metoder til affaldsbehandling**
- **Anbefaling:** Må ikke bortskaffes sammen med husholdningsaffald. Må ikke udledes i kloaksystemet.
- **Urensede emballager:**
- **Anbefaling:** Bortskaffes i overensstemmelse med myndighedernes forskrifter.

### PUNKT 14: Transportoplysninger

- **14.1 UN-nummer**
- **ADR, IMDG, IATA** UN1789
- **14.2 UN-forsendelsesbetegnelse (UN proper shipping name)**
- **ADR** 1789 SALTSYRE, blanding
- **IMDG, IATA** HYDROCHLORIC ACID mixture

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· 14.3 Transportfareklasse(r)

· ADR, IMDG, IATA



· klasse

8 Ætsende stoffer

· Faremærkat

8

· 14.4 Emballagegruppe

· ADR, IMDG, IATA

II

· 14.5 Miljøfarer:

Ikke relevant.

· 14.6 Særlige forsigtighedsregler for brugeren

Advarsel: Ætsende stoffer

· Farenummer (Kemler-tal):

80

· EMS-nummer:

F-A,S-B

· Segregation groups

Strong acids

· Stowage Category

C

· 14.7 Bulktransport i henhold til bilag II til MARPOL og IBC-koden

Ikke relevant.

· Transport/yderligere oplysninger:

· ADR

· Begrænsede mængder (LQ)

1L

· Undtagne mængder (EQ)

Kode: E2

Største tilladte nettomængde pr. indvendig emballage: 30 ml

Største tilladte nettomængde pr. ydre emballage: 500 ml

· Transportkategori

2

· Tunnelrestriktionskode

E

· IMDG

· Limited quantities (LQ)

1L

· Excepted quantities (EQ)

Code: E2

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 500 ml

· UN "Model Regulation":

UN 1789 SALTSYRE, BLANDING, 8, II

### **PUNKT 15: Oplysninger om regulering**

· 15.1 Særlige bestemmelser/særlig lovgivning for stoffet eller blandingen med hensyn til sikkerhed, sundhed og miljø

· Direktiv 2012/18/EU

· Navngivne farlige stoffer - BILAG I Ingen af indholdsstofferne er optaget i listen.

· Forordning (EF) nr. 1907/2006 BILAG XVII Begrænsninger: 3, 72

· Direktiv 2011/65/EU om begrænsning af anvendelsen af visse farlige stoffer i elektrisk og elektronisk udstyr - Bilag II

Ingen af indholdsstofferne er optaget i listen.

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- **Nationale forskrifter:**
- **Oplysninger vedrørende beskæftigelsesbegrænsning:**  
Arbejdstagere må ikke udsættes for de kræftfremkaldende farestoffer som dette præparat indeholder. I enkelte tilfælde kan myndighederne bevillige undtagelser.
- **MAL-Code:** 5-6
- **15.2 Kemikaliesikkerhedsvurdering:** Der er ikke udført kemikaliesikkerhedsvurdering.

## PUNKT 16: Andre oplysninger

Alle ovenstående angivelser er baseret på vores aktuelle viden, udgør dog ikke nogen tilsikring af produkttegenskaber og stifter heller ikke noget kontraktligt retsforhold.

- **Risikoangivelser**

- H302 Farlig ved indtagelse.
- H314 Forårsager svære ætsninger af huden og øjenskader.
- H318 Forårsager alvorlig øjenskade.
- H335 Kan forårsage irritation af luftvejene.
- H350 Kan fremkalde kræft.

- **Forkortelser og akronymer:**

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 Harmonised System of Classification and Labelling of Chemicals  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 VOC: Volatile Organic Compounds (USA, EU)  
 Måleteknisk Arbejdshygiejnisk Luftbehov  
 PBT: Persistent, Bioaccumulative and Toxic  
 vPvB: very Persistent and very Bioaccumulative  
 Acute Tox. 4: Akut toksicitet - oral – Kategori 4  
 Skin Corr. 1B: Hudætsning/hudirritation – Kategori 1B  
 Eye Dam. 1: Alvorlige øjenskader/øjenirritation – Kategori 1  
 Carc. 1B: Carcinogenicitet – Kategori 1B  
 STOT SE 3: Specifik målorgantoksicitet (enkelt eksponering) – Kategori 3

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# Veiligheidsinformatieblad

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## RUBRIEK 1: Identificatie van de stof of het mengsel en van de vennootschap/onderneming

- **1.1 Productidentificatie**
- **Handelsnaam:** SCHIFF'S REAGENT
- **Artikelnummer:** 26052-05, 26774-01, 26853-01, 26052-06, 26920-04
- **UFI:** XAY0-U0E6-5008-AJA5
- **1.2 Relevant geïdentificeerd gebruik van de stof of het mengsel en ontraden gebruik**  
Geen verdere relevante informatie verkrijgbaar.
- **Toepassing van de stof / van de bereiding** Laboratoriumchemicaliën
- **1.3 Details betreffende de verstreker van het veiligheidsinformatieblad**
- **Fabrikant/leverancier:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- Aurion  
Binnenhaven 5  
6709 PD Wageningen  
The Netherlands  
Tel: 31 317 415094  
Fax: 31 317 415955  
email: info@aurion.nl
- **Inlichtingengevende sector:** Product safety department
- **1.4 Telefoonnummer voor noodgevallen:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## RUBRIEK 2: Identificatie van de gevaren

- **2.1 Indeling van de stof of het mengsel**
- **Indeling overeenkomstig Verordening (EG) nr. 1272/2008**



GHS08 gezondheidsgevaar

Carc. 1B H350 Kan kanker veroorzaken.



GHS05 corrosie

Skin Corr. 1B H314 Veroorzaakt ernstige brandwonden en oogletsel.

Eye Dam. 1 H318 Veroorzaakt ernstig oogletsel.

- **2.2 Etiketteringselementen**
- **Etikettering overeenkomstig Verordening (EG) nr. 1272/2008**  
Het product is geclassificeerd en geëtiketteerd volgens de CLP-verordening.

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## · Gevarenpictogrammen



GHS05 GHS08

## · Signaalwoord Gevaar

### · Gevaaraanduidende componenten voor de etikettering:

hydrogeenchloride

4,4'-(4-iminocyclohexa-2,5-dienylideenmethyleen)dianilinehydrochloride

dinatriumdisulfiet

### · Gevarenaanduidingen

H314 Veroorzaakt ernstige brandwonden en oogletsel.

H350 Kan kanker veroorzaken.

### · Veiligheidsaanbevelingen

P303+P361+P353 BIJ CONTACT MET DE HUID (of het haar): verontreinigde kleding onmiddellijk uittrekken.  
Huid met water afspoelen [of afdouchen].

P305+P351+P338 BIJ CONTACT MET DE OGEN: voorzichtig afspoelen met water gedurende een aantal minuten; contactlenzen verwijderen, indien mogelijk; blijven spoelen.

P310 Onmiddellijk een ANTIGIFCENTRUM/arts raadplegen.

P321 Specifieke behandeling vereist (zie op dit etiket).

P405 Achter slot bewaren.

P501 De inhoud en de verpakking verwerken volgens de plaatselijke/regionale/nationale/internationale voorschriften.

### · Aanvullende gegevens:

EUH031 Vormt giftig gas in contact met zuren.

### · 2.3 Andere gevaren

### · Resultaten van PBT- en zPzB-beoordeling

· PBT: Niet bruikbaar.

· zPzB: Niet bruikbaar.

## RUBRIEK 3: Samenstelling en informatie over de bestanddelen

### · 3.2 Chemische karakterisering: Mengsels

· Beschrijving: Mengsel van na elkaar aangevoerde stoffen met ongevaarlijke bijmengingen.

### · Gevaarlijke inhoudstoffen:

CAS: 7647-01-0 EINECS: 231-595-7	hydrogeenchloride ⚠ Skin Corr. 1B, H314; Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; STOT SE 3, H335	>2,5-≤10%
CAS: 7681-57-4 EINECS: 231-673-0	dinatriumdisulfiet ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302	>2,5-≤10%
CAS: 569-61-9 EINECS: 209-321-2	4,4'-(4-iminocyclohexa-2,5-dienylideenmethyleen)dianilinehydrochloride ⚠ Carc. 1B, H350	≤2,5%

### · Aanvullende gegevens:

De woordelijke inhoud van de opgegeven aanwijzingen inzake de mogelijke gevaren is te vinden in hoofdstuk 16.

## RUBRIEK 4: Eerstehulpmaatregelen

### · 4.1 Beschrijving van de eerstehulpmaatregelen

· Algemene informatie: Verontreinigde kleding onmiddellijk uittrekken.

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- **Na het inademen:** Bij bewusteloosheid ligging en vervoer in stabiele zijligging.
- **Na huidcontact:** Onmiddellijk met water en zeep afwassen en goed naspoelen.
- **Na oogcontact:** Ogen met open ooglid een aantal minuten onder stromend water afspoelen en dokter raadplegen.
- **Na inslikken:** Drink zeer veel water en voer verse lucht aan. Onmiddellijk een dokter waarschuwen.
- **4.2 Belangrijkste acute en uitgestelde symptomen en effecten** Geen verdere relevante informatie verkrijgbaar.
- **4.3 Vermelding van de vereiste onmiddellijke medische verzorging en speciale behandeling**  
Geen verdere relevante informatie verkrijgbaar.

### RUBRIEK 5: Brandbestrijdingsmaatregelen

- **5.1 Blusmiddelen**
- **Geschikte blusmiddelen:** Brandblusmaatregelen op omgeving afstemmen.
- **5.2 Speciale gevaren die door de stof of het mengsel worden veroorzaakt**  
Geen verdere relevante informatie verkrijgbaar.
- **5.3 Advies voor brandweerlieden**
- **Speciale beschermende kleding:** Ademhalingstoestel aantrekken.

### RUBRIEK 6: Maatregelen bij het accidenteel vrijkomen van de stof of het mengsel

- **6.1 Persoonlijke voorzorgsmaatregelen, beschermingsmiddelen en noodprocedures**  
Ademhalingstoestel aantrekken.  
Beschermende kleding aantrekken. Niet beschermde personen op afstand houden.
- **6.2 Milieuvorzorgsmaatregelen:** Niet in de riolering/het oppervlaktewater/het grondwater laten terechtkomen.
- **6.3 Insluitings- en reinigingsmethoden en -materiaal:**  
Met vloeistofbindend materiaal (zand, bergmeel, zuurbinder, universele binder, zaagmeel) opnemen.  
Neutralisatiemiddel gebruiken.  
Besmet materiaal zoals afval volgens punt 13 verwijderen.  
Voor voldoende ventilatie zorgen.
- **6.4 Verwijzing naar andere rubrieken**  
Informatie inzake veilig gebruik - zie hoofdstuk 7.  
Informatie inzake persoonlijke beschermingsuitrusting - zie hoofdstuk 8.  
Informatie inzake berging - zie hoofdstuk 13.

### RUBRIEK 7: Hantering en opslag

- **7.1 Voorzorgsmaatregelen voor het veilig hanteren van de stof of het mengsel**  
Voor goede ventilatie/afzuiging op de werkplaatsen zorgen.  
Tanks voorzichtig openen en behandelen.  
Aërosolvorming vermijden.
- **Informatie m.b.t. brand- en ontploffingsgevaar:** Ademhalingstoestellen gereedhouden.
- **7.2 Voorwaarden voor een veilige opslag, met inbegrip van incompatibele producten**
- **Opslag:**
- **Eisen ten opzichte van opslagruimte en tanks:** Geen bijzondere eisen.
- **Informatie m.b.t. gezamenlijke opslag:** Niet bewaren met zuren.
- **Verdere inlichtingen over eisen m.b.t. de opslag:** Tanks ondoordringbaar gesloten houden.
- **7.3 Specifiek eindgebruik** Geen verdere relevante informatie verkrijgbaar.

### RUBRIEK 8: Maatregelen ter beheersing van blootstelling/persoonlijke bescherming

- **Aanvullende gegevens m.b.t. de inrichting van technische installaties:** Geen aanvullende gegevens. Zie 7.

(Vervolg op blz. 4)

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## · 8.1 Controleparameters

· **Bestanddelen met grenswaarden die m.b.t. de werkruimte in acht genomen moeten worden:**

**7647-01-0 hydrogeenchloride**

WGW	Korte termijn waarde: 15 mg/m <sup>3</sup> , 10 ppm Lange termijn waarde: 8 mg/m <sup>3</sup> , 5 ppm
-----	--

· **Aanvullende gegevens:** Als basis dienden lijsten die bij opstelling geldig waren.

## · 8.2 Maatregelen ter beheersing van blootstelling

· **Persoonlijke beschermingsvoorzieningen:**

· **Algemene beschermings- en gezondheidsmaatregelen:**

Verwijderd houden van eet- en drinkwaren.

Verontreinigde kleding onmiddellijk uittrekken.

Vóór de pauze en aan het einde van werktijd handen wassen.

Beschermende kleding afzonderlijk bewaren.

Aanraking met de ogen vermijden.

Aanraking met de ogen en de huid vermijden.

· **Ademhalingsbescherming:**

Bij korte of geringe belasting ademfiltertoestel; bij intensieve resp. langdurige expositie een van de omringende lucht onafhankelijk ademhalingsstoestel gebruiken.

· **Handbescherming:**



Veiligheidshandschoenen

Het handschoenmateriaal moet ondoorlatend en bestand zijn tegen het product / de stof / de bereiding.

Op grond van falende testen kan geen aanbeveling voor handschoenmateriaal voor het product / de bereiding / het chemicaliënmengsel afgegeven worden.

Kies handschoenmateriaal rekening houdend met de penetratietijden, de permeatiegraden en de degradatie.

· **Handschoenmateriaal**

De keuze van een geschikte handschoen is niet alleen afhankelijk van het materiaal, maar ook van andere kwaliteitskenmerken en verschilt van fabrikant tot fabrikant. Aangezien het product uit meerdere stoffen is samengesteld, is de duurzaamheid van de handschoenmaterialen niet vooraf berekenbaar en moet derhalve vóór het gebruik worden getest.

· **Doordringingstijd van het handschoenmateriaal**

De precieze penetratietijd kunt u te weten komen bij de handschoenfabrikant; houd er rekening mee.

· **Oogbescherming:**



Nauw aansluitende veiligheidsbril

## RUBRIEK 9: Fysische en chemische eigenschappen

· **9.1 Informatie over fysische en chemische basiseigenschappen**

· **Algemene gegevens**

· **Voorkomen:**

· **Vorm:** Vloeistof

· **Kleur:** Helder

· **Geur:** Sterk

· **Geurdrempelwaarde:** Niet bepaald.

(Vervolg op blz. 5)



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· <b>pH-waarde bij 20 °C:</b>	2
· <b>Toestandsverandering</b>	
· <b>Smelt-/vriespunt:</b>	Niet bepaald.
· <b>Beginkookpunt en kooktraject:</b>	Niet bepaald.
· <b>Vlampunt:</b>	Niet bruikbaar.
· <b>Ontvlambaarheid (vast, gas):</b>	Niet bruikbaar.
· <b>Ontledingstemperatuur:</b>	Niet bepaald.
· <b>Zelfontbrandingstemperatuur:</b>	Het produkt ontbrandt niet uit zichzelf.
· <b>Ontploffingseigenschappen:</b>	Het produkt is niet ontploffingsgevaarlijk.
· <b>Ontploffingsgrenzen:</b>	
· <b>Onderste:</b>	Niet bepaald.
· <b>Bovenste:</b>	Niet bepaald.
· <b>Dampspanning bij 20 °C:</b>	23 hPa
· <b>Dichtheid:</b>	Niet bepaald.
· <b>Relatieve dichtheid</b>	Niet bepaald.
· <b>Dampdichtheid</b>	Niet bepaald.
· <b>Verdampingsnelheid</b>	Niet bepaald.
· <b>Oplosbaarheid in/mengbaarheid met</b>	
· <b>Water:</b>	Niet resp. gering mengbaar.
· <b>Verdelingscoëfficiënt: n-octanol/water:</b>	Niet bepaald.
· <b>Viscositeit</b>	
· <b>Dynamisch:</b>	Niet bepaald.
· <b>Kinematisch:</b>	Niet bepaald.
· <b>Oplosmiddelgehalte:</b>	
· <b>Water:</b>	89,0 %
· <b>VOC (EG)</b>	0,00 %
· <b>Gehalte aan vaste bestanddelen:</b>	0,0 %
· <b>9.2 Overige informatie</b>	Geen verdere relevante informatie verkrijgbaar.

### RUBRIEK 10: Stabiliteit en reactiviteit

- **10.1 Reactiviteit** Geen verdere relevante informatie verkrijgbaar.
- **10.2 Chemische stabiliteit**
- **Thermische afbraak / te vermijden omstandigheden:** Geen afbraak bij gebruik volgens voorschrift.
- **10.3 Mogelijke gevaarlijke reacties** Contact met zuren maakt giftige gassen vrij.
- **10.4 Te vermijden omstandigheden** Geen verdere relevante informatie verkrijgbaar.
- **10.5 Chemisch op elkaar inwerkende materialen:** Geen verdere relevante informatie verkrijgbaar.
- **10.6 Gevaarlijke ontledingsproducten:** Geen gevaarlijke ontbindingsproducten bekend.

### RUBRIEK 11: Toxicologische informatie

- **11.1 Informatie over toxicologische effecten**
- **Acute toxiciteit** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.

(Vervolg op blz. 6)

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- **Primaire aandoening:**
- **Huidcorrosie/-irritatie**  
Veroorzaakt ernstige brandwonden en oogletsel.
- **Ernstig oogletsel/oogirritatie**  
Veroorzaakt ernstig oogletsel.
- **Sensibilisatie van de luchtwegen/de huid**  
Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **CMR-effecten (kankerverwekkendheid, mutageniteit en giftigheid voor de voortplanting)**
- **Mutageniteit in geslachtscellen** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Kankerverwekkendheid**  
Kan kanker veroorzaken.
- **Giftigheid voor de voortplanting** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **STOT bij eenmalige blootstelling** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **STOT bij herhaalde blootstelling** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.
- **Gevaar bij inademing** Gebaseerd op beschikbare gegevens; aan de indelingscriteria is niet voldaan.

### RUBRIEK 12: Ecologische informatie

- **12.1 Toxiciteit**
- **Aquatische toxiciteit:** Geen verdere relevante informatie verkrijgbaar.
- **12.2 Persistentie en afbreekbaarheid** Geen verdere relevante informatie verkrijgbaar.
- **12.3 Bioaccumulatie** Geen verdere relevante informatie verkrijgbaar.
- **12.4 Mobiliteit in de bodem** Geen verdere relevante informatie verkrijgbaar.
- **Verdere ecologische informatie:**
- **Algemene informatie:**  
Waterbezwaarlijkheid (NL): Z(1) niet afbreekbare stoffen met gevaarlijke eigenschappen voor mens en milieu (carcinogeniteit/mutageniteit/ reprotoxiciteit/bioaccumulerend vermogen/ toxiciteit of persistentie)  
Gevaar voor water klasse 3 (D) (Zelfclassificatie): gevaar voor water groot  
Niet lozen in grondwater, oppervlaktewater of riolering, ook niet in kleine hoeveelheden.  
Mag niet onverdund of niet geneutraliseerd in oppervlaktewater of in afwateringskanaal geloosd worden.  
Gevaar voor drinkwater zelfs bij het uitlopen van zeer geringe hoeveelheden in de ondergrond.
- **12.5 Resultaten van PBT- en zPzB-beoordeling**
- **PBT:** Niet bruikbaar.
- **zPzB:** Niet bruikbaar.
- **12.6 Andere schadelijke effecten** Geen verdere relevante informatie verkrijgbaar.

### RUBRIEK 13: Instructies voor verwijdering

- **13.1 Afvalverwerkingsmethoden**
- **Aanbeveling:** Mag niet tesamen met huisvuil gestort worden of in de riolering terecht komen.
- **Niet gereinigde verpakkingen:**
- **Aanbeveling:** Afvalverwijdering volgens overheidsbepalingen.

### RUBRIEK 14: Informatie met betrekking tot het vervoer

- **14.1 VN-nummer**
- **ADR, IMDG, IATA** UN1789
- **14.2 Juiste ladingnaam overeenkomstig de modelreglementen van de VN**
- **ADR** 1789 CHLOORWATERSTOFZUUR, Mengsel

(Vervolg op blz. 7)

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· <b>IMDG, IATA</b>	<i>HYDROCHLORIC ACID mixture</i>
· <b>14.3 Transportgevarenklasse(n)</b>	
· <b>ADR, IMDG, IATA</b>	
· <b>klasse</b>	8 Bijtende stoffen
· <b>Etiket</b>	8
· <b>14.4 Verpakkingsgroep:</b>	
· <b>ADR, IMDG, IATA</b>	II
· <b>14.5 Milieugevaren:</b>	<i>Niet bruikbaar.</i>
· <b>14.6 Bijzondere voorzorgen voor de gebruiker</b>	<i>Waarschuwing: Bijtende stoffen</i>
· <b>Gevaarsidentificatienummer (Kemler-getal):</b>	80
· <b>EMS-nummer:</b>	F-A,S-B
· <b>Segregation groups</b>	Strong acids
· <b>Stowage Category</b>	C
· <b>14.7 Vervoer in bulk overeenkomstig bijlage II bij Marpol en de IBC-code</b>	<i>Niet bruikbaar.</i>
· <b>Transport/verdere gegevens:</b>	
· <b>ADR</b>	
· <b>Beperkte hoeveelheden (LQ)</b>	1L
· <b>Uitgezonderde hoeveelheden (EQ)</b>	Code: E2 Grootste netto hoeveelheid per binnenverpakking: 30 ml Grootste netto hoeveelheid per buitenverpakking: 500 ml
· <b>Vervoerscategorie</b>	2
· <b>Tunnelbeperkingscode</b>	E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>VN "Model Regulation":</b>	UN 1789 CHLOORWATERSTOFZUUR, MENGSEL, 8, II

**RUBRIEK 15: Regelgeving**· **15.1 Specifieke veiligheids-, gezondheids- en milieureglementen en -wetgeving voor de stof of het mengsel**· **SZW-lijst van kankerverwekkende stoffen**

569-61-9 4,4'-(4-iminocyclohexa-2,5-dienylideenmethyleen)dianilinehydrochloride

· **SZW-lijst van mutagene stoffen**

geen der bestanddelen staat op de lijst.

· **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Vruchtbaarheid**

geen der bestanddelen staat op de lijst.

(Vervolg op blz. 8)

NL

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· **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Ontwikkeling**

geen der bestanddelen staat op de lijst.

· **NIET-limitatieve lijst van voor de voortplanting giftige stoffen - Borstvoeding**

geen der bestanddelen staat op de lijst.

· **Lijst Zeer Zorgwekkende Stoffen (ZZS)**

569-61-9 4,4'-(4-iminocyclohexa-2,5-dienylideenmethyleen)dianilinehydrochloride

· **Lijst van Potentieel Zeer Zorgwekkende Stoffen**

geen der bestanddelen staat op de lijst.

· **Richtlijn 2012/18/EU**

· **Gevaarlijke stoffen die met naam genoemd worden - BIJLAGE I** geen der bestanddelen staat op de lijst.

· **Verordening (EG) nr. 1907/2006 BIJLAGE XVII** Beperkingsvoorwaarden: 3, 72

· **Richtlijn 2011/65/EU betreffende beperking van het gebruik van bepaalde gevaarlijke stoffen in elektrische en elektronische apparatuur - Bijlage II**

geen der bestanddelen staat op de lijst.

· **Nationale voorschriften:**

· **Aanwijzingen m.b.t. tewerkstellingsbeperking:**

Werknemers mogen aan de kankerverwekkende gevaarlijke stoffen van deze toebereiding niet blootgesteld worden. In uitzonderingsgevallen kan de overheid speciale vergunningen afgeven.

· **Gevaarklasse v. water:**

Waterbezwaarlijkheid (NL): Z(1) niet afbreekbare stoffen met gevaarlijke eigenschappen voor mens en milieu (carcinogeniteit/mutageniteit/ reprotoxiciteit/bioaccumulerend vermogen/ toxiciteit of persistentie)

· **15.2 Chemischeveiligheidsbeoordeling:** Een chemische veiligheidsbeoordeling is niet uitgevoerd.

### RUBRIEK 16: Overige informatie

Deze gegevens zijn gebaseerd op de huidige stand van onze kennis. Zij beschrijven echter geen garantie van produkteigenschappen en vestigen geen contractuele rechtsbetrekking.

· **Relevante zinnen**

H302 Schadelijk bij inslikken.

H314 Veroorzaakt ernstige brandwonden en oogletsel.

H318 Veroorzaakt ernstig oogletsel.

H335 Kan irritatie van de luchtwegen veroorzaken.

H350 Kan kanker veroorzaken.

· **Afkortingen en acroniemen:**

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 Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxiciteit - oraal - Categorie 4

Skin Corr. 1B: Huidcorrosie/-irritatie - Categorie 1B

Eye Dam. 1: Ernstig oogletsel/oogirritatie - Categorie 1

Carc. 1B: Kankerverwekkendheid - Categorie 1B

STOT SE 3: Specifieke doelorgaantoxiciteit bij eenmalige blootstelling - Categorie 3

# Ohutuskaart

## vastavalt 1907/2006/EÜ, Artikkel 31

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### 1. JAGU: Aine/segude ning äriühingu/ettevõtja identifitseerimine

- **1.1 Tootetähis**
- **Kaubanduslik nimetus: SCHIFF'S REAGENT**
- **Artikkel:** 26052-05, 26774-01, 26853-01, 26052-06, 26920-04
- **UFI:** XAY0-U0E6-5008-AJA5
- **1.2 Aine või segu asjaomased kindlaksmääratud kasutusala ning kasutusala, mida ei soovitata**  
Täiendav oluline teave puudub.
- **Aine/preparaadi kasutamine** Laborikemikaalid
- **1.3 Andmed ohutuskaardi tarnija kohta**
- **Tootja/Tarnija:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkck@aol.com  
www.emsdiasum.com
- **Lähemat informatsiooni saab:** Product safety department
- **1.4 Hädaabitelefoni number**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2. JAGU: Ohtude identifitseerimine

- **2.1 Aine või segu klassifitseerimine**
- **Klassifikatsioon vastavalt määrusele (EÜ) nr 1272/2008**



GHS08 terviseoht

Carc. 1B H350 Võib põhjustada vähktõbe.



GHS05 söövitus

Skin Corr. 1B H314 Põhjustab rasket nahasöövitust ja silmakahjustusi.

Eye Dam. 1 H318 Põhjustab raskeid silmakahjustusi.

- **2.2 Mürgistuselemendid**
- **Mürgistus vastavalt määrusele (EÜ) nr 1272/2008**  
Toode on klassifitseeritud ja märgistatud CLP (ainete ja segude klassifitseerimise, märgistamise ja pakendamise käsitleva) määruse nõuete kohaselt.
- **Ohupiktogramm**



GHS05



GHS08

- **Tunnussõna** Ettevaatust
- **Mürgistuskomponendid ohu määramiseks:**  
Vesinikkloriid, veevaba  
4,4'-(4-iminotsükloheksa-2,5-dienülideenmetüleen)dianiliinvesinikkloriid  
naatriummetabisulfit

(Jätub lehel 2)

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**Kaubanduslik nimetus: SCHIFF'S REAGENT**

(Jätkub lehel 1)

**· Ohulaused**

H314 Põhjustab rasket nahasöövitust ja silmakahjustusi.

H350 Võib põhjustada vähktõbe.

**· Hoiatuslaused**

P303+P361+P353 NAHALE (või juustele) SATTUMISE KORRAL: kõik saastunud rõivad viivitamata seljast võtta. Loputada nahka veega [või loputada duši all].

P305+P351+P338 SILMA SATTUMISE KORRAL: loputada mitme minuti jooksul ettevaatlikult veega. Eemaldada kontaktläätsed, kui neid kasutatakse ja kui neid on kerge eemaldada. Loputada veel kord.

P310 Võtta viivitamata ühendust MÜRGISTUSTEABEKESKUSE/ arstiga.

P321 Nõuab eriravi (vt käesoleval etiketil).

P405 Hoida lukustatult.

P501 Sisu/konteineri käitlus vastavuses kohalike/regionaalsete/rahvuslike/rahvusvaheliste nõuetega.

**· Lisainformatsioon:**

EUH031 Kokkupuutel hapetega eraldub mürgine gaas.

**· 2.3 Muud ohud**
**· Püsivate, bioakumuleeruvate ja toksiliste ning väga püsivate ja väga bioakumuleeruvate omaduste hindamine**
**· PBT:** Ei ole kohaldatav.

**· vPvB:** Ei ole kohaldatav.

### 3. JAGU: Koostis/teave koostisainete kohta

**· 3.2 Keemiline iseloomustus: Segud**
**· Kirjeldus:** Segu allpool loetletud ohutute lisanditega substantsidest.

**· Ohtlikud koostisosad:**

CAS: 7647-01-0 EINECS: 231-595-7	Vesinikkloriid, veevaba ☠ Skin Corr. 1B, H314; Eye Dam. 1, H318; ☠ Acute Tox. 4, H302; STOT SE 3, H335	>2,5-≤10%
CAS: 7681-57-4 EINECS: 231-673-0	naatriummetabisulfit ☠ Eye Dam. 1, H318; ☠ Acute Tox. 4, H302	>2,5-≤10%
CAS: 569-61-9 EINECS: 209-321-2	4,4'-(4-iminotsükloheksa-2,5-dienülideenmetüleen)dianiliinvesinikkloriid ☠ Carc. 1B, H350	≤2,5%

**· Lisainformatsioon:** Loetletud riskitunnuste sõnaline kuju vastab osale 16.

### 4. JAGU: Esmaabimeetmed

**· 4.1 Esmaabimeetmete kirjeldus**
**· Üldine informatsioon:** Koheselt eemaldada kogu tootega määratud riietus.

**· Pärast sissehingamist:** Teadvuse kaotamise korral paigutage patsient stabiilselt külili transportimiseks.

**· Pärast nahale sattumist:** Koheselt peske veega ja seebiga ning loputage täielikult.

**· Pärast silma sattumist:** Loputage avatud silm mõne minuti jooksul jooksva vee all. Seejärel konsulteerige arstiga.

**· Pärast allaneelamist:** Juua suur kogus vett ja tagada värske õhk. Koheselt kutsuda arst.

**· 4.2 Olulisemad akuutsed ja hilisemad sümptomid ning mõju** Täiendav oluline teave puudub.

**· 4.3 Märges igasuguse vältimatu meditsiiniabi ja erikohtlemise vajalikkuse kohta** Täiendav oluline teave puudub.

### 5. JAGU: Tulekustutusmeetmed

**· 5.1 Tulekustutusvahendid**
**· Sobivad kustutusained:** Kasutage ümbritsevate tingimustega sobivaid tulekustutusmeetodeid.

**· 5.2 Aine või segu seotud erilised ohud** Täiendav oluline teave puudub.

(Jätkub lehelt 3)

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(Jät kub lehel 2)

- **5.3 Nõuanded tuletõrjajatele**
- **Kaitsevarustus:** Hingamisteid kaitsev seade.

### 6. JAGU: Meetmed juhusliku sattumise korral keskkonda

- **6.1 Isikukaitsemeetmed, kaitsevahendid ja toimimine hädaolukorras**  
Kasutage hingamisteid kaitsev seade.  
Kandke kaitsevarustus. Hoidke eemal kaitsmata isikuid.
- **6.2 Keskkonnakaitse meetmed:** Ei tohi sattuda kanalisatsiooni / pinnasele või krundivette.
- **6.3 Tõkestamis- ning puhastamismeetodid ja -vahendid:**  
Absorbeerige vedelikku siduva materjaliga (liiv, diatomiit, happesidujad, universaalsed sidujad, saepuru).  
Kasutage neutraliseerivat ainet.  
Käideldge saastunud materjal samuti nagu jäätmed vastavalt punktile 13.  
Tagage vastav ventilatsioon.
- **6.4 Viited muudele jagudele**  
Informatsiooni ohutu kasutamise kohta vaadake osas 7.  
Informatsiooni isikliku kaitsevarustuse kohta vaadake osas 8.  
Informatsiooni käitlemise kohta vaadake osas 13.

### 7. JAGU: Käitlemine ja ladustamine

- **7.1 Ohutu käitlemise tagamiseks vajalikud ettevaatusabinõud**  
Tagage hea ventilatsioon/äravool töökohas.  
Avage ja töötage mahutiga ettevaatlikult.  
Vältige udu teket.
- **Informatsioon tule- ja plahvatusvastase kaitse kohta:** Hoida hingamisteede kaitse seade kättesaadavalt.
- **7.2 Ohutu ladustamise tingimused, sealhulgas sobimatud ladustamistingimused**
- **Hoiustamine:**
- **Nõudmised ladudele ja anumatele:** Ei ole erilisi nõudeid.
- **Informatsioon koos hoiustamise kohta:** Mitte säilitada koos hapetega.
- **Lähem informatsioon hoiustamistingimuste kohta:** Anum säilitada tihedalt suletuna.
- **7.3 Erikasutus** Täiendav oluline teave puudub.

### 8. JAGU: Kokkupuute ohjamine/isikukaitse

- **Lisainformatsioon tehniliste seadmete kohta:** Rohkem andmeid pole; vaadake punkt 7.

#### · 8.1 Kontrolliparameetrid

- **Töökohas järelevalvatavad koostisained piirväärtustega:**

**7647-01-0 Vesinikkloriid, veevaba**

TLV	Lühiajaline väärtus: 15 mg/m <sup>3</sup> , 10 ppm
	Pikaajaline väärtus: 8 mg/m <sup>3</sup> , 5 ppm

- **Lisainformatsioon:** Nimekirjad kehtivad valmistamise ajal, mil kasutatakse alusdokumendina.

#### · 8.2 Kokkupuute ohjamine

- **Isiklik kaitsevarustus:**
- **Üldised kaitse- ja hügieenimeetmed:**  
Hoida eemal toiduainetest, jookidest ja söökidest.  
Koheselt eemaldage kõik määratud ja saastunud riideid  
Enne pause ja töö lõpetamisel peske käed.  
Säilitada kaitseriietus eraldi.

(Jät kub lehelt 4)

# Ohutuskaart

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(Jätkub lehel 3)

Vältida kokkupuudet silmadega.

Vältida kokkupuudet silmade ja nahaga.

• **Hingamisteede kaitse:**

Lühiajalise kokkupuute või madala saaste korral kasutage respiraatorfiltrit. Intensiivse või pikema kokkupuute korral kasutage suletud ringlusega hingamisteede kaitseseade.

• **Käte kaitsmine:**



Kaitsekindad

Kinnaste materjal peab olema läbitungimatu ja vastupidav toote/ substantsi/ preparaadi suhtes.

Puuduvate testide tõttu ei saa tootele/ preparaadile/ kemikaalide segule anda mingeid soovitusi kindamaterjali kohta.

Kinda materjali valik tuginedes läbitungivuse aegadele, difusiooni ja degradeerimisnäitajatele

• **Kinnaste materjal**

Sobivate kinnaste valik ei sõltu mitte üksnes materjalist, vaid samuti ka kvaliteedimärgistusest ning erineb erinevate tootjate puhul. Kuna toode on mitmest substantsist koosnev preparaat, ei saa kinnaste materjali vastupidavust kalkuleerida ette ning seepärast tuleb neid enne kasutust kontrollida.

• **Kinnaste materjali läbitungimisaeg**

Täpse läbitungimisaega on määranud kaitsekinnaste tootja ning see tuleb järgida.

• **Silmakaitse:**



Tihedalt hermeetilised kaitseprillid

### 9. JAGU: Füüsikalised ja keemilised omadused

• **9.1 Teave üldiste füüsikaliste ja keemiliste omaduste kohta**

• **Üldine informatsioon**

• **Välimus:**

- **Kuju:** Vedelik
- **Värvus:** Selge
- **Lõhn:** Tugev
- **Lõhnalävi:** Pole määratud.

• **pH väärtus juures 20 °C:** 2

• **Oleku muutus**

- **Sulamis-/külmumispunkt:** Ei ole määratud.
- **Keemise algpunkt ja keemisivahemik:** Ei ole määratud.

• **Leekpunkt:** Ei ole kohaldatav.

• **Süttivus (tahke, gaasiline):** Ei ole kohaldatav.

• **Lagunemistemperatuur:** Pole määratud.

• **Isesüttimistemperatuur:** Toode ei ole isesüttiv.

• **Plahvatusohtlikkus:** Toode ei tekita plahvatusohtu.

• **Plahvatuse piirväärtused:**

- **Alumine:** Pole määratud.
- **Ülemine:** Pole määratud.

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(Jätub lehel 4)

· <b>Aururõhk juures 20 °C:</b>	23 hPa
· <b>Tihedus:</b>	Ei ole määratud.
· <b>Suhteline tihedus</b>	Pole määratud.
· <b>Auru tihedus</b>	Pole määratud.
· <b>Aurustumiskiirus:</b>	Pole määratud.
· <b>Lahustatavus / Segunemine</b>	
· <b>Vesi:</b>	Mittesegunev või raskelt segatav.
· <b>Jaotustegur: n-oktaanol/-vesi:</b>	Pole määratud.
· <b>Viskoossus:</b>	
· <b>Dünaamiline:</b>	Pole määratud.
· <b>Kinemaatiline:</b>	Pole määratud.
· <b>Lahusti sisaldus:</b>	
· <b>Vesi:</b>	89,0 %
· <b>VOC (EC)</b>	0,00 %
· <b>Tahkeaine sisaldus:</b>	0,0 %
· <b>9.2 Muu teave</b>	Täiendav oluline teave puudub.

### 10. JAGU: Püsivus ja reaktsioonivõime

- **10.1 Reaktsioonivõime** Täiendav oluline teave puudub.
- **10.2 Keemiline stabiilsus**
- **Termiline lagunemine / välditavad tingimused:**  
Lagunemist ei esine, kui kasutatakse vastavalt spetsifikatsioonidele.
- **10.3 Ohtlike reaktsioonide võimalikkus** Kokkupuutel hapetega vabastab toksilisi gaase.
- **10.4 Tingimused, mida tuleb vältida** Täiendav oluline teave puudub.
- **10.5 Kokkusobimatud materjalid:** Täiendav oluline teave puudub.
- **10.6 Ohtlikud lagsaadused:** Toote ohtlikku lagunemist ei ole teada.

### 11. JAGU: Teave toksilisuse kohta

- **11.1 Teave toksikoloogiliste mõjude kohta**
- **Akuutne toksilisus** Kätesaadavate andmete põhjal ei ole klassifitseerimiskriteeriumid täidetud.
- **Peamine ärritav efekt:**
- **Nahka söövitav/ärritav**  
Põhjustab rasket nahasöövitust ja silmakahjustusi.
- **Rasket silmade kahjustust/ärritust põhjustav**  
Põhjustab raskeid silmakahjustusi.
- **Hingamisteede või naha ülitundlikkust põhjustav**  
Kätesaadavate andmete põhjal ei ole klassifitseerimiskriteeriumid täidetud.
- **Kantserogeensed, mutageensed ja reproduktiivtoksilised mõjud**
- **Mutageensus sugurakkudele** Kätesaadavate andmete põhjal ei ole klassifitseerimiskriteeriumid täidetud.
- **Kantserogeensus**  
Võib põhjustada vähktõbe.
- **Reproduktiivtoksilisus** Kätesaadavate andmete põhjal ei ole klassifitseerimiskriteeriumid täidetud.
- **Sihetorgani suhtes toksilised – ühekordne kokkupuude**  
Kätesaadavate andmete põhjal ei ole klassifitseerimiskriteeriumid täidetud.
- **Sihetorgani suhtes toksilised – korduv kokkupuude**  
Kätesaadavate andmete põhjal ei ole klassifitseerimiskriteeriumid täidetud.

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(Jätkub lehel 5)

· **Hingamiskahjustus** Kättesaadavate andmete põhjal ei ole klassifitseerimiskriteeriumid täidetud.


### 12. JAGU: Ökoloogiline teave

- **12.1 Toksilisus**
- **Veetoksilisus:** Täiendav oluline teave puudub.
- **12.2 Püsivus ja lagunduvus** Täiendav oluline teave puudub.
- **12.3 Bioakumulatsioon** Täiendav oluline teave puudub.
- **12.4 Liikuvus pinnases** Täiendav oluline teave puudub.
- **Täiendav keskkonnaalane informatsioon:**
- **Üldised märkused:**  
 Vee ohtlikkusklass 3 (Saksa eeskirjad) (Enesehinnang): eriti ohtlik vee jaoks  
 Toode ei tohi sattuda krundivetesse, vooluveekogudesse või kanalisatsioonisüsteemi, isegi vähestes kogustes.  
 Ei tohi sattuda kanalisatsioonisüsteemi või torudesse lahjendamata või neutraliseerimata kujul.  
 Ohtlik joogiveele isegi eriti väikeste koguste krunti sattumisel.
- **12.5 Püsivate, bioakumuleeruvate ja toksiliste ning väga püsivate ja väga bioakumuleeruvate omaduste hindamine**
- **PBT:** Ei ole kohaldatav.
- **vPvB:** Ei ole kohaldatav.
- **12.6 Muud kahjulikud mõjud** Täiendav oluline teave puudub.

### 13. JAGU: Jäätmekäitlus

- **13.1 Jäätmetöötlusmeetodid**
- **Soovitused** Ei tohi käidelda koos olmeprügiga. Toode ei tohi sattuda kanalisatsioonisüsteemidesse.
- **Puhastamata pakend:**
- **Soovitused:** Käitlemine peab toimuma vastavalt ametlikele eeskirjadele.

### 14. JAGU: Veonõuded

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>· <b>14.1 ÜRO number</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>   | <p>UN1789</p>   |
| <ul style="list-style-type: none"> <li>· <b>14.2 ÜRO veose tunnusnimetus</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG, IATA</b></li> </ul>   | <p>1789 KLOORVESINIKHAFE segu<br/>HYDROCHLORIC ACID mixture</p> |
| <ul style="list-style-type: none"> <li>· <b>14.3 Transpordi ohuklass(id)</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>  | <p>8 Korrodeerivad substantsid.</p>                             |
| <div style="text-align: center;">  </div> <ul style="list-style-type: none"> <li>· <b>klass</b></li> <li>· <b>Ohtlikkusmärke</b></li> </ul> | <p>8</p>  |
| <ul style="list-style-type: none"> <li>· <b>14.4 Pakendirühm</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>  | <p>II</p>   |
| <ul style="list-style-type: none"> <li>· <b>14.5 Keskkonnaohud:</b></li> </ul>   | <p>Ei ole kohaldatav.</p>                                       |

(Jätkub lehelt 7)

# Ohutuskaart

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(Jätkub lehel 6)

· <b>14.6 Eriettevaatusabinõud kasutajatele</b>	Hoiatus: Korrodeerivad substantsid.
· <b>Ohu tunnus-number (Ohtlikkuskood (Kemler)):</b>	80
· <b>EMS Number:</b>	F-A,S-B
· <b>Segregation groups</b>	Strong acids
· <b>Stowage Category</b>	C
· <b>14.7 Transportimine mahlastina kooskõlas MARPOLi II lisaga ja IBC koodeksiga</b>	Ei ole kohaldatav.
· <b>Transport/Lisainformatsioon:</b>	
· <b>ADR</b>	
· <b>Püüratud koguses (piirkogus LQ)</b>	1L
· <b>Erandkogused (EQ)</b>	Kood: E2 Maksimaalne netokogus sisepakendi kohta: 30 ml Maksimaalne netokogus välispakendi kohta: 500 ml
· <b>Veo kategooria</b>	2
· <b>Tunneli piirangu kood:</b>	E
· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	1L
· <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>UN "Model Regulation":</b>	UN 1789 KLOORVESINIKHAPE SEGU, 8, II

### 15. JAGU: Reguleerivad õigusaktid

- **15.1 Ainete ja segude suhtes kohaldatavad ohutuse-, tervise- ja keskkonnaalased eeskirjad/õigusaktid**
- **Directiva 2012/18/UE**
- **Nimetatud ohtlikud ained - I LISA** Ükski koostisaine ei ole nimekirjas.
- **MÄÄRUS (EÜ) nr 1907/2006 XVII LISA** Piirangu tingimused: 3, 72

· **Direktiiv 2011/65/EL teatavate ohtlike ainete kasutamise piiramise kohta elektri- ja elektroonikaseadmetes - II Lisa**

Ükski koostisaine ei ole nimekirjas.

- **Rahvuslikud eeskirjad:**
- **Informatsioon kasutuspüürangute kohta:**  
Töötajaid ei tohi allutada selle ohtliku käesolevas materjalis sisalduva kantserogeense aine mõjule. Teatud juhtudel võivad vastavad vastutavad asutused siiski teha erandeid.
- **15.2 Kemikaaliohutuse hindamine:** Kemikaaliohutuse hindamist ei ole läbi viidud.

### 16. JAGU: Muu teave

Käesolev informatsioon põhineb meie praegustele teadmistele. Siiski ei garanteeri see mõningaid spetsiifilisi tooteomadusi ning ei kehtesta õiguslikult kehtivaid lepingulisi suhteid.

- **Vastavad tunnused**  
H302 Allaneelamisel kahjulik.  
H314 Põhjustab rasket nahasöövitust ja silmakahjustusi.  
H318 Põhjustab raskeid silmakahjustusi.  
H335 Võib põhjustada hingamisteede ärritust.

(Jätkub lehelt 8)

**Ohutuskaart**  
**vastavalt 1907/2006/EÜ, Artikkel 31**

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(Jätub lehel 7)

*H350 Võib põhjustada vähktõbe.***Lühendid ja akronüümid:***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 Harmonised System of Classification and Labelling of Chemicals**EINECS: European Inventory of Existing Commercial Chemical Substances**ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**VOC: Volatile Organic Compounds (USA, EU)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Acute Tox. 4: Äge mürgisus - Suukaudne kokkupuude – 4. kategooria**Skin Corr. 1B: Nahasöövitus/-ärritus – 1.B kategooria**Eye Dam. 1: Raske silmakahjustus/silmade ärritus – 1. kategooria**Carc. 1B: Kantserogeensus – 1.B kategooria**STOT SE 3: Mürgisus sihtelundi suhtes (ühekordne kokkupuude) – 3. kategooria*

EE

# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

Date d'impression : 07.10.2021

Révision: 07.10.2021

### RUBRIQUE 1: Identification de la substance/du mélange et de la société/l'entreprise

- **1.1 Identificateur de produit**
- **Nom du produit:** SCHIFF'S REAGENT
- **Code du produit:** 26052-05, 26774-01, 26853-01, 26052-06, 26920-04
- **UFI:** XAY0-U0E6-5008-AJA5
- **1.2 Utilisations identifiées pertinentes de la substance ou du mélange et utilisations déconseillées**  
Pas d'autres informations importantes disponibles.
- **Emploi de la substance / de la préparation** Produits chimiques pour laboratoires
- **1.3 Renseignements concernant le fournisseur de la fiche de données de sécurité**
- **Producteur/fournisseur:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkck@aol.com  
www.emsdiasum.com
- **Service chargé des renseignements:** Product safety department
- **1.4 Numéro d'appel d'urgence:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### RUBRIQUE 2: Identification des dangers

- **2.1 Classification de la substance ou du mélange**
- **Classification selon le règlement (CE) n° 1272/2008**



GHS08 danger pour la santé

Carc. 1B      H350 Peut provoquer le cancer.



GHS05 corrosion

Skin Corr. 1B H314 Provoque des brûlures de la peau et de graves lésions des yeux.

Eye Dam. 1 H318 Provoque de graves lésions des yeux.

- **2.2 Éléments d'étiquetage**
- **Étiquetage selon le règlement (CE) n° 1272/2008** Le produit est classifié et étiqueté selon le règlement CLP.
- **Pictogrammes de danger**



GHS05



GHS08

- **Mention d'avertissement** Danger
- **Composants dangereux déterminants pour l'étiquetage:**  
chlorure d'hydrogène  
chlorhydrate de 4,4'-(4-iminocyclohexa-2,5-diénylidèneméthylène)dianiline  
disulfite de disodium
- **Mentions de danger**  
H314 Provoque des brûlures de la peau et de graves lésions des yeux.

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**Nom du produit: SCHIFF'S REAGENT**

(suite de la page 1)

H350 Peut provoquer le cancer.

· **Conseils de prudence**

P303+P361+P353 **EN CAS DE CONTACT AVEC LA PEAU (ou les cheveux):** Enlever immédiatement tous les vêtements contaminés. Rincer la peau à l'eau [ou se doucher].

P305+P351+P338 **EN CAS DE CONTACT AVEC LES YEUX:** Rincer avec précaution à l'eau pendant plusieurs minutes. Enlever les lentilles de contact si la victime en porte et si elles peuvent être facilement enlevées. Continuer à rincer.

P310 Appeler immédiatement un CENTRE ANTIPOISON/un médecin.

P321 Traitement spécifique (voir sur cette étiquette).

P405 Garder sous clef.

P501 Éliminer le contenu/récipient conformément à la réglementation locale/régionale/nationale/internationale.

· **Indications complémentaires:**

EUH031 Au contact d'un acide, dégage un gaz toxique.

· **2.3 Autres dangers**

· **Résultats des évaluations PBT et vPvB**

· **PBT:** Non applicable.

· **vPvB:** Non applicable.

### RUBRIQUE 3: Composition/informations sur les composants

· **3.2 Caractérisation chimique: Mélanges**

· **Description:** Mélange des substances mentionnées à la suite avec des additifs non dangereux.

· **Composants dangereux:**

CAS: 7647-01-0 EINECS: 231-595-7	chlorure d'hydrogène ⚠ Skin Corr. 1B, H314; Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; STOT SE 3, H335	>2,5-≤10%
CAS: 7681-57-4 EINECS: 231-673-0	disulfite de disodium ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302	>2,5-≤10%
CAS: 569-61-9 EINECS: 209-321-2	chlorhydrate de 4,4'-(4-iminocyclohexa-2,5-diénylidène)di-aniline ⚠ Carc. 1B, H350	≤2,5%

· **Indications complémentaires:** Pour le libellé des phrases de risque citées, se référer au chapitre 16.

### RUBRIQUE 4: Premiers secours

· **4.1 Description des premiers secours**

· **Remarques générales:** Enlever immédiatement les vêtements contaminés par le produit.

· **Après inhalation:** En cas d'inconscience, coucher et transporter la personne en position latérale stable.

· **Après contact avec la peau:** Laver immédiatement à l'eau et au savon et bien rincer.

· **Après contact avec les yeux:**

Rincer les yeux, pendant plusieurs minutes, sous l'eau courante en écartant bien les paupières et consulter un médecin.

· **Après ingestion:** Boire de l'eau en abondance et donner de l'air frais. Consulter immédiatement un médecin.

· **4.2 Principaux symptômes et effets, aigus et différés** Pas d'autres informations importantes disponibles.

· **4.3 Indication des éventuels soins médicaux immédiats et traitements particuliers nécessaires**

Pas d'autres informations importantes disponibles.

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# Fiche de données de sécurité

## selon 1907/2006/CE, Article 31

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Nom du produit: SCHIFF'S REAGENT

(suite de la page 2)

### RUBRIQUE 5: Mesures de lutte contre l'incendie

- **5.1 Moyens d'extinction**
- **Moyens d'extinction:** Adapter les mesures d'extinction d'incendie à l'environnement.
- **5.2 Dangers particuliers résultant de la substance ou du mélange**  
Pas d'autres informations importantes disponibles.
- **5.3 Conseils aux pompiers**
- **Équipement spécial de sécurité:** Porter un appareil de protection respiratoire.

### RUBRIQUE 6: Mesures à prendre en cas de dispersion accidentelle

- **6.1 Précautions individuelles, équipement de protection et procédures d'urgence**  
Porter un appareil de protection respiratoire.  
Porter un équipement de sécurité. Eloigner les personnes non protégées.
- **6.2 Précautions pour la protection de l'environnement:**  
Ne pas rejeter dans les canalisations, dans les eaux de surface et dans les nappes d'eau souterraines.
- **6.3 Méthodes et matériel de confinement et de nettoyage:**  
Recueillir les liquides à l'aide d'un produit absorbant (sable, kieselguhr, neutralisant d'acide, liant universel, sciure).  
Utiliser un neutralisant.  
Évacuer les matériaux contaminés en tant que déchets conformément au point 13.  
Assurer une aération suffisante.
- **6.4 Référence à d'autres rubriques**  
Afin d'obtenir des informations pour une manipulation sûre, consulter le chapitre 7.  
Afin d'obtenir des informations sur les équipements de protection personnels, consulter le chapitre 8.  
Afin d'obtenir des informations sur l'élimination, consulter le chapitre 13.

### RUBRIQUE 7: Manipulation et stockage

- **7.1 Précautions à prendre pour une manipulation sans danger**  
Veiller à une bonne ventilation/aspiration du poste de travail.  
Ouvrir et manipuler les récipients avec précaution.  
Éviter la formation d'aérosols.
- **Préventions des incendies et des explosions:** Tenir des appareils de protection respiratoire prêts.
- **7.2 Conditions d'un stockage sûr, y compris d'éventuelles incompatibilités**
- **Stockage:**
- **Exigences concernant les lieux et conteneurs de stockage:** Aucune exigence particulière.
- **Indications concernant le stockage commun:** Ne pas stocker avec des acides.
- **Autres indications sur les conditions de stockage:** Tenir les emballages hermétiquement fermés.
- **7.3 Utilisation(s) finale(s) particulière(s)** Pas d'autres informations importantes disponibles.

### RUBRIQUE 8: Contrôles de l'exposition/protection individuelle

- **Indications complémentaires pour l'agencement des installations techniques:**  
Sans autre indication, voir point 7.
- **8.1 Paramètres de contrôle**

· **Composants présentant des valeurs-seuil à surveiller par poste de travail:**

7647-01-0 chlorure d'hydrogène

VLEP Valeur momentané: 7,6 mg/m<sup>3</sup>, 5 ppm

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**7681-57-4 disulfite de disodium**VLEP Valeur à long terme: 5 mg/m<sup>3</sup>**Remarques supplémentaires:**

Le présent document s'appuie sur les listes en vigueur au moment de son élaboration.

**8.2 Contrôles de l'exposition****Equipement de protection individuel:****Mesures générales de protection et d'hygiène:**

Tenir à l'écart des produits alimentaires, des boissons et de la nourriture pour animaux.

Retirer immédiatement les vêtements souillés ou humectés.

Se laver les mains avant les pauses et en fin de travail.

Conserver à part les vêtements de protection.

Eviter tout contact avec les yeux.

Eviter tout contact avec les yeux et avec la peau.

**Protection respiratoire:**

En cas d'exposition faible ou de courte durée, utiliser un filtre respiratoire; en cas d'exposition intense ou durable, utiliser un appareil de respiration indépendant de l'air ambiant.

**Protection des mains:**

Gants de protection

Le matériau des gants doit être imperméable et résistant au produit / à la substance / à la préparation.

À cause du manque de tests, aucune recommandation pour un matériau de gants pour le produit / la préparation / le mélange de produits chimiques ne peut être donnée.

Choix du matériau des gants en fonction des temps de pénétration, du taux de perméabilité et de la dégradation.

**Matériau des gants**

Le choix de gants appropriés dépend non seulement du matériau, mais aussi d'autres critères de qualité qui peuvent varier d'un fabricant à l'autre. Puisque le produit représente une préparation composée de plusieurs substances, la résistance des matériaux des gants ne peut pas être calculée à l'avance et doit, alors, être contrôlée avant l'utilisation.

**Temps de pénétration du matériau des gants**

Le temps de pénétration exact est à déterminer par le fabricant des gants de protection et à respecter.

**Protection des yeux:**

Lunettes de protection hermétiques

### RUBRIQUE 9: Propriétés physiques et chimiques

**9.1 Informations sur les propriétés physiques et chimiques essentielles****Indications générales****Aspect:****Forme:**

Liquide

**Couleur:**

Transparent

**Odeur:**

Forte

**Seuil olfactif:**

Non déterminé.

**valeur du pH à 20 °C:**

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· <b>Changement d'état</b>	
· <b>Point de fusion/point de congélation:</b>	Non déterminé.
· <b>Point initial d'ébullition et intervalle d'ébullition:</b>	Non déterminé.
· <b>Point d'éclair</b>	Non applicable.
· <b>Inflammabilité (solide, gaz):</b>	Non applicable.
· <b>Température de décomposition:</b>	Non déterminé.
· <b>Température d'auto-inflammabilité:</b>	Le produit ne s'enflamme pas spontanément.
· <b>Propriétés explosives:</b>	Le produit n'est pas explosif.
· <b>Limites d'explosion:</b>	
· <b>Inférieure:</b>	Non déterminé.
· <b>Supérieure:</b>	Non déterminé.
· <b>Pression de vapeur à 20 °C:</b>	23 hPa
· <b>Densité:</b>	Non déterminée.
· <b>Densité relative</b>	Non déterminé.
· <b>Densité de vapeur:</b>	Non déterminé.
· <b>Taux d'évaporation:</b>	Non déterminé.
· <b>Solubilité dans/miscibilité avec l'eau:</b>	Pas ou peu miscible
· <b>Coefficient de partage: n-octanol/eau:</b>	Non déterminé.
· <b>Viscosité:</b>	
· <b>Dynamique:</b>	Non déterminé.
· <b>Cinématique:</b>	Non déterminé.
· <b>Teneur en solvants:</b>	
· <b>Eau:</b>	89,0 %
· <b>VOC (CE)</b>	0,00 %
· <b>Teneur en substances solides:</b>	0,0 %
· <b>9.2 Autres informations</b>	Pas d'autres informations importantes disponibles.

### RUBRIQUE 10: Stabilité et réactivité

- **10.1 Réactivité** Pas d'autres informations importantes disponibles.
- **10.2 Stabilité chimique**
- **Décomposition thermique/conditions à éviter:** Pas de décomposition en cas d'usage conforme.
- **10.3 Possibilité de réactions dangereuses** Un contact avec les acides provoque la libération de gaz toxiques.
- **10.4 Conditions à éviter** Pas d'autres informations importantes disponibles.
- **10.5 Matières incompatibles:** Pas d'autres informations importantes disponibles.
- **10.6 Produits de décomposition dangereux:** Pas de produits de décomposition dangereux connus

### RUBRIQUE 11: Informations toxicologiques

- **11.1 Informations sur les effets toxicologiques**
- **Toxicité aiguë** Compte tenu des données disponibles, les critères de classification ne sont pas remplis.

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- **Effet primaire d'irritation:**
- **Corrosion cutanée/irritation cutanée**  
Provoque des brûlures de la peau et de graves lésions des yeux.
- **Lésions oculaires graves/irritation oculaire**  
Provoque de graves lésions des yeux.
- **Sensibilisation respiratoire ou cutanée**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Effets CMR (cancérogène, mutagène et toxique pour la reproduction)**
- **Mutagénicité sur les cellules germinales**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Cancérogénicité**  
Peut provoquer le cancer.
- **Toxicité pour la reproduction**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Toxicité spécifique pour certains organes cibles - exposition unique**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Toxicité spécifique pour certains organes cibles - exposition répétée**  
Compte tenu des données disponibles, les critères de classification ne sont pas remplis.
- **Danger par aspiration** Compte tenu des données disponibles, les critères de classification ne sont pas remplis.

### RUBRIQUE 12: Informations écologiques

- **12.1 Toxicité**
- **Toxicité aquatique:** Pas d'autres informations importantes disponibles.
- **12.2 Persistance et dégradabilité** Pas d'autres informations importantes disponibles.
- **12.3 Potentiel de bioaccumulation** Pas d'autres informations importantes disponibles.
- **12.4 Mobilité dans le sol** Pas d'autres informations importantes disponibles.
- **Autres indications écologiques:**
- **Indications générales:**  
Catégorie de pollution des eaux 3 (D) (Classification propre): très polluant  
Ne pas laisser pénétrer dans la nappe phréatique, les eaux ou les canalisations, même pas en petite quantité.  
Ne doit pas pénétrer à l'état non dilué ou non neutralisé dans les eaux usées ou le collecteur.  
Danger pour l'eau potable dès fuite d'une quantité minime dans le sous-sol.
- **12.5 Résultats des évaluations PBT et VPVB**
- **PBT:** Non applicable.
- **vPvB:** Non applicable.
- **12.6 Autres effets néfastes** Pas d'autres informations importantes disponibles.

### RUBRIQUE 13: Considérations relatives à l'élimination

- **13.1 Méthodes de traitement des déchets**
- **Recommandation:** Ne doit pas être évacué avec les ordures ménagères. Ne pas laisser pénétrer dans les égouts.
- **Emballages non nettoyés:**
- **Recommandation:** Evacuation conformément aux prescriptions légales.

### RUBRIQUE 14: Informations relatives au transport

- **14.1 Numéro ONU**
- **ADR, IMDG, IATA** UN1789

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<ul style="list-style-type: none"> <li>· 14.2 Désignation officielle de transport de l'ONU</li> <li>· ADR</li> <li>· IMDG, IATA</li> </ul>	<p>1789 ACIDE CHLORHYDRIQUE mélange HYDROCHLORIC ACID mixture</p>
<ul style="list-style-type: none"> <li>· 14.3 Classe(s) de danger pour le transport</li> <li>· ADR, IMDG, IATA</li> </ul>	
	
<ul style="list-style-type: none"> <li>· Classe</li> <li>· Étiquette</li> </ul>	<p>8 Matières corrosives. 8</p>
<ul style="list-style-type: none"> <li>· 14.4 Groupe d'emballage</li> <li>· ADR, IMDG, IATA</li> </ul>	<p>II</p>
<ul style="list-style-type: none"> <li>· 14.5 Dangers pour l'environnement:</li> </ul>	<p>Non applicable.</p>
<ul style="list-style-type: none"> <li>· 14.6 Précautions particulières à prendre par l'utilisateur</li> <li>· Numéro d'identification du danger (Indice Kemler):</li> <li>· No EMS:</li> <li>· Segregation groups</li> <li>· Stowage Category</li> </ul>	<p>Attention: Matières corrosives. 80 F-A,S-B Strong acids C</p>
<ul style="list-style-type: none"> <li>· 14.7 Transport en vrac conformément à l'annexe II de la convention Marpol et au recueil IBC</li> </ul>	<p>Non applicable.</p>
<ul style="list-style-type: none"> <li>· Indications complémentaires de transport:</li> </ul>	
<ul style="list-style-type: none"> <li>· ADR</li> <li>· Quantités limitées (LQ)</li> <li>· Quantités exceptées (EQ)</li> </ul>	<p>1L Code: E2 Quantité maximale nette par emballage intérieur: 30 ml Quantité maximale nette par emballage extérieur: 500 ml</p>
<ul style="list-style-type: none"> <li>· Catégorie de transport</li> <li>· Code de restriction en tunnels</li> </ul>	<p>2 E</p>
<ul style="list-style-type: none"> <li>· IMDG</li> <li>· Limited quantities (LQ)</li> <li>· Excepted quantities (EQ)</li> </ul>	<p>1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml</p>
<ul style="list-style-type: none"> <li>· "Règlement type" de l'ONU:</li> </ul>	<p>UN 1789 ACIDE CHLORHYDRIQUE MÉLANGE, 8, II</p>

### RUBRIQUE 15: Informations relatives à la réglementation

- 15.1 Réglementations/législation particulières à la substance ou au mélange en matière de sécurité, de santé et d'environnement
- Directive 2012/18/UE
- Substances dangereuses désignées - ANNEXE I Aucun des composants n'est compris.

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· **RÈGLEMENT (CE) N° 1907/2006 ANNEXE XVII** Conditions de limitation: 3, 72

· **Directive 2011/65/UE relative à la limitation de l'utilisation de certaines substances dangereuses dans les équipements électriques et électroniques – Annexe II**

Aucun des composants n'est compris.

· **Prescriptions nationales:**

· **Indications sur les restrictions de travail:**

Le personnel ne doit pas être exposé aux substances dangereuses cancérigènes contenues dans cette préparation.  
Les autorités peuvent autoriser des exceptions dans des cas particuliers.

· **15.2 Évaluation de la sécurité chimique:** Une évaluation de la sécurité chimique n'a pas été réalisée.

### RUBRIQUE 16: Autres informations

Ces indications sont fondées sur l'état actuel de nos connaissances, mais ne constituent pas une garantie quant aux propriétés du produit et ne donnent pas lieu à un rapport juridique contractuel.

· **Phrases importantes**

H302 Nocif en cas d'ingestion.

H314 Provoque des brûlures de la peau et de graves lésions des yeux.

H318 Provoque de graves lésions des yeux.

H335 Peut irriter les voies respiratoires.

H350 Peut provoquer le cancer.

· **Acronymes et abréviations:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Toxicité aiguë - voie orale – Catégorie 4

Skin Corr. 1B: Corrosion cutanée/irritation cutanée – Catégorie 1B

Eye Dam. 1: Lésions oculaires graves/irritation oculaire – Catégorie 1

Carc. 1B: Cancérogénicité – Catégorie 1B

STOT SE 3: Toxicité spécifique pour certains organes cibles (exposition unique) – Catégorie 3

# Sicherheitsdatenblatt

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### ABSCHNITT 1: Bezeichnung des Stoffs beziehungsweise des Gemischs und des Unternehmens

· **1.1 Produktidentifikator**

· **Handelsname:** SCHIFF'S REAGENT

· **Artikelnummer:** 26052-05, 26774-01, 26853-01, 26052-06, 26920-04

· **UFI:** XAY0-U0E6-5008-AJA5

· **1.2 Relevante identifizierte Verwendungen des Stoffs oder Gemischs und Verwendungen, von denen abgeraten wird**

Keine weiteren relevanten Informationen verfügbar.

· **Verwendung des Stoffes / des Gemisches** Laborchemikalien

· **1.3 Einzelheiten zum Lieferanten, der das Sicherheitsdatenblatt bereitstellt**

· **Hersteller/Lieferant:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: sgkcck@aol.com

www.emsdiasum.com

Science Services GmbH

Unterhachinger Str. 75

81737 München Germany

Tel: +49(0)89 18 93 668-0

safety@scienceservices.de

Deutschland: +49 (0)89 19240, 24h Giftnotruf Munchen, www.toxinfo.org

Osterreich: +43 1406 43 43, Gesundheit Osterreich GmbH, 24 h

· **Auskunfteibereich:** Product safety department

· **1.4 Notrufnummer:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

### ABSCHNITT 2: Mögliche Gefahren

· **2.1 Einstufung des Stoffs oder Gemischs**

· **Einstufung gemäß Verordnung (EG) Nr. 1272/2008**



GHS08 Gesundheitsgefahr

Carc. 1B H350 Kann Krebs erzeugen.



GHS05 Ätzwirkung

Skin Corr. 1B H314 Verursacht schwere Verätzungen der Haut und schwere Augenschäden.

Eye Dam. 1 H318 Verursacht schwere Augenschäden.

· **2.2 Kennzeichnungselemente**

· **Kennzeichnung gemäß Verordnung (EG) Nr. 1272/2008**

Das Produkt ist gemäß CLP-Verordnung eingestuft und gekennzeichnet.

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## · Gefahrenpiktogramme



GHS05 GHS08

## · Signalwort Gefahr

## · Gefahrbestimmende Komponenten zur Etikettierung:

Salzsäure

4,4'-(4-Iminocyclohexa-2,5-dienylidenmethylendianilinhydrochlorid

Dinatriumdisulfit

## · Gefahrenhinweise

H314 Verursacht schwere Verätzungen der Haut und schwere Augenschäden.

H350 Kann Krebs erzeugen.

## · Sicherheitshinweise

P303+P361+P353 BEI BERÜHRUNG MIT DER HAUT (oder dem Haar): Alle kontaminierten Kleidungsstücke sofort ausziehen. Haut mit Wasser abwaschen [oder duschen].

P305+P351+P338 BEI KONTAKT MIT DEN AUGEN: Einige Minuten lang behutsam mit Wasser spülen. Eventuell vorhandene Kontaktlinsen nach Möglichkeit entfernen. Weiter spülen.

P310 Sofort GIFTINFORMATIONSZENTRUM/Arzt anrufen.

P321 Besondere Behandlung (siehe auf diesem Kennzeichnungsetikett).

P405 Unter Verschluss aufbewahren.

P501 Entsorgung des Inhalts / des Behälters gemäß den örtlichen / regionalen / nationalen / internationalen Vorschriften.

## · Zusätzliche Angaben:

EUH031 Entwickelt bei Berührung mit Säure giftige Gase.

Nur für gewerbliche Anwender.

## · 2.3 Sonstige Gefahren

## · Ergebnisse der PBT- und vPvB-Beurteilung

· PBT: Nicht anwendbar.

· vPvB: Nicht anwendbar.

### ABSCHNITT 3: Zusammensetzung/Angaben zu Bestandteilen

## · 3.2 Chemische Charakterisierung: Gemische

· Beschreibung: Gemisch aus nachfolgend angeführten Stoffen mit ungefährlichen Beimengungen.

## · Gefährliche Inhaltsstoffe:

CAS: 7647-01-0 EINECS: 231-595-7	Salzsäure ⚠ Skin Corr. 1B, H314; Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302; STOT SE 3, H335	>2,5-≤10%
CAS: 7681-57-4 EINECS: 231-673-0	Dinatriumdisulfit ⚠ Eye Dam. 1, H318; ⚠ Acute Tox. 4, H302	>2,5-≤10%
CAS: 569-61-9 EINECS: 209-321-2	4,4'-(4-Iminocyclohexa-2,5-dienylidenmethylendianilinhydrochlorid ⚠ Carc. 1B, H350	≤2,5%

· Zusätzliche Hinweise: Der Wortlaut der angeführten Gefahrenhinweise ist dem Abschnitt 16 zu entnehmen.

### ABSCHNITT 4: Erste-Hilfe-Maßnahmen

## · 4.1 Beschreibung der Erste-Hilfe-Maßnahmen

· Allgemeine Hinweise: Mit Produkt verunreinigte Kleidungsstücke unverzüglich entfernen.

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- **Nach Einatmen:** Bei Bewusstlosigkeit Lagerung und Transport in stabiler Seitenlage.
- **Nach Hautkontakt:** Sofort mit Wasser und Seife abwaschen und gut nachspülen.
- **Nach Augenkontakt:**  
Augen bei geöffnetem Lidspalt mehrere Minuten unter fließendem Wasser abspülen und Arzt konsultieren.
- **Nach Verschlucken:** Reichlich Wasser nachtrinken und Frischluftzufuhr. Unverzüglich Arzt hinzuziehen.
- **4.2 Wichtigste akute und verzögert auftretende Symptome und Wirkungen**  
Keine weiteren relevanten Informationen verfügbar.
- **4.3 Hinweise auf ärztliche Soforthilfe oder Spezialbehandlung**  
Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 5: Maßnahmen zur Brandbekämpfung

- **5.1 Löschmittel**
- **Geeignete Löschmittel:** Feuerlöschmaßnahmen auf die Umgebung abstimmen.
- **5.2 Besondere vom Stoff oder Gemisch ausgehende Gefahren**  
Keine weiteren relevanten Informationen verfügbar.
- **5.3 Hinweise für die Brandbekämpfung**
- **Besondere Schutzausrüstung:** Atemschutzgerät anlegen.

### ABSCHNITT 6: Maßnahmen bei unbeabsichtigter Freisetzung

- **6.1 Personenbezogene Vorsichtsmaßnahmen, Schutzausrüstungen und in Notfällen anzuwendende Verfahren**  
Atemschutzgerät anlegen.  
Schutzausrüstung tragen. Ungeschützte Personen fernhalten.
- **6.2 Umweltschutzmaßnahmen:** Nicht in die Kanalisation/Oberflächenwasser/Grundwasser gelangen lassen.
- **6.3 Methoden und Material für Rückhaltung und Reinigung:**  
Mit flüssigkeitsbindendem Material (Sand, Kieselgur, Säurebinder, Universalbinder, Sägemehl) aufnehmen.  
Neutralisationsmittel anwenden.  
Kontaminiertes Material als Abfall nach Abschnitt 13 entsorgen.  
Für ausreichende Lüftung sorgen.
- **6.4 Verweis auf andere Abschnitte**  
Informationen zur sicheren Handhabung siehe Abschnitt 7.  
Informationen zur persönlichen Schutzausrüstung siehe Abschnitt 8.  
Informationen zur Entsorgung siehe Abschnitt 13.

### ABSCHNITT 7: Handhabung und Lagerung

- **7.1 Schutzmaßnahmen zur sicheren Handhabung**  
Für gute Belüftung/Absaugung am Arbeitsplatz sorgen.  
Behälter mit Vorsicht öffnen und handhaben.  
Aerosolbildung vermeiden.
- **Hinweise zum Brand- und Explosionsschutz:** Atemschutzgeräte bereithalten.
- **7.2 Bedingungen zur sicheren Lagerung unter Berücksichtigung von Unverträglichkeiten**
- **Lagerung:**
- **Anforderung an Lagerräume und Behälter:** Keine besonderen Anforderungen.
- **Zusammenlagerungshinweise:** Nicht zusammen mit Säuren lagern.
- **Weitere Angaben zu den Lagerbedingungen:** Behälter dicht geschlossen halten.
- **Lagerklasse:**
- **Klassifizierung nach Betriebssicherheitsverordnung (BetrSichV):** -

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· 7.3 Spezifische Endanwendungen Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 8: Begrenzung und Überwachung der Exposition/Persönliche Schutzausrüstungen

· **Zusätzliche Hinweise zur Gestaltung technischer Anlagen:** Keine weiteren Angaben, siehe Abschnitt 7.· **8.1 Zu überwachende Parameter**· **Bestandteile mit arbeitsplatzbezogenen, zu überwachenden Grenzwerten:****7647-01-0 Salzsäure**AGW Langzeitwert: 3 mg/m<sup>3</sup>, 2 ml/m<sup>3</sup>  
2(1);DFG, EU, Y**7681-57-4 Dinatriumdisulfit**

MAK vgl. Abschn. IV

· **Zusätzliche Hinweise:** Als Grundlage dienen die bei der Erstellung gültigen Listen.· **8.2 Begrenzung und Überwachung der Exposition**· **Persönliche Schutzausrüstung:**· **Allgemeine Schutz- und Hygienemaßnahmen:**

Von Nahrungsmitteln, Getränken und Futtermitteln fernhalten.

Beschmutzte, getränkte Kleidung sofort ausziehen.

Vor den Pausen und bei Arbeitsende Hände waschen.

Getrennte Aufbewahrung der Schutzkleidung.

Berührung mit den Augen vermeiden.

Berührung mit den Augen und der Haut vermeiden.

· **Atemschutz:**

Bei kurzzeitiger oder geringer Belastung Atemfiltergerät; bei intensiver bzw. längerer Exposition unluftunabhängiges Atemschutzgerät verwenden.

· **Handschutz:**

Schutzhandschuhe

Das Handschuhmaterial muss undurchlässig und beständig gegen das Produkt / den Stoff / die Zubereitung sein. Aufgrund fehlender Tests kann keine Empfehlung zum Handschuhmaterial für das Produkt / die Zubereitung / das Chemikaliengemisch abgegeben werden.

Auswahl des Handschuhmaterials unter Beachtung der Durchbruchzeiten, Permeationsraten und der Degradation.

· **Handschuhmaterial**

Die Auswahl eines geeigneten Handschuhs ist nicht nur vom Material, sondern auch von weiteren Qualitätsmerkmalen abhängig und von Hersteller zu Hersteller unterschiedlich. Da das Produkt eine Zubereitung aus mehreren Stoffen darstellt, ist die Beständigkeit von Handschuhmaterialien nicht vorausberechenbar und muß deshalb vor dem Einsatz überprüft werden.

· **Durchdringungszeit des Handschuhmaterials**

Die genaue Durchbruchzeit ist beim Schutzhandschuhhersteller zu erfahren und einzuhalten.

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## · Augenschutz:



Dichtschließende Schutzbrille

### ABSCHNITT 9: Physikalische und chemische Eigenschaften

## · 9.1 Angaben zu den grundlegenden physikalischen und chemischen Eigenschaften

## · Allgemeine Angaben

## · Aussehen:

· Form:	Flüssigkeit
· Farbe:	Klar
· Geruch:	Stark
· Geruchsschwelle:	Nicht bestimmt.

· pH-Wert bei 20 °C: 2

## · Zustandsänderung

· Schmelzpunkt/Gefrierpunkt:	Nicht bestimmt.
· Siedebeginn und Siedebereich:	Nicht bestimmt.

· Flammpunkt: Nicht anwendbar.

· Entzündbarkeit (fest, gasförmig): Nicht anwendbar.

· Zersetzungstemperatur: Nicht bestimmt.

· Selbstentzündungstemperatur: Das Produkt ist nicht selbstentzündlich.

· Explosive Eigenschaften: Das Produkt ist nicht explosionsgefährlich.

## · Explosionsgrenzen:

· Untere:	Nicht bestimmt.
· Obere:	Nicht bestimmt.

· Dampfdruck bei 20 °C: 23 hPa

· Dichte: Nicht bestimmt.

· Relative Dichte: Nicht bestimmt.

· Dampfichte: Nicht bestimmt.

· Verdampfungsgeschwindigkeit: Nicht bestimmt.

## · Löslichkeit in / Mischbarkeit mit

· Wasser: Nicht bzw. wenig mischbar.

· Verteilungskoeffizient: n-Octanol/Wasser: Nicht bestimmt.

## · Viskosität:

· Dynamisch:	Nicht bestimmt.
· Kinematisch:	Nicht bestimmt.

## · Lösemittelgehalt:

· Wasser:	89,0 %
· VOC (EU)	0,00 %

· Festkörpergehalt: 0,0 %

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## · 9.2 Sonstige Angaben

Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 10: Stabilität und Reaktivität

- **10.1 Reaktivität** Keine weiteren relevanten Informationen verfügbar.
- **10.2 Chemische Stabilität**
- **Thermische Zersetzung / zu vermeidende Bedingungen:**  
Keine Zersetzung bei bestimmungsgemäßer Verwendung.
- **10.3 Möglichkeit gefährlicher Reaktionen** Kontakt mit Säuren setzt giftige Gase frei.
- **10.4 Zu vermeidende Bedingungen** Keine weiteren relevanten Informationen verfügbar.
- **10.5 Unverträgliche Materialien:** Keine weiteren relevanten Informationen verfügbar.
- **10.6 Gefährliche Zersetzungsprodukte:** Keine gefährlichen Zersetzungsprodukte bekannt.

### ABSCHNITT 11: Toxikologische Angaben

- **11.1 Angaben zu toxikologischen Wirkungen**
- **Akute Toxizität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Primäre Reizwirkung:**
- **Ätz-/Reizwirkung auf die Haut**  
Verursacht schwere Verätzungen der Haut und schwere Augenschäden.
- **Schwere Augenschädigung/-reizung**  
Verursacht schwere Augenschäden.
- **Sensibilisierung der Atemwege/Haut** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **CMR-Wirkungen (krebserzeugende, erbgutverändernde und fortpflanzungsgefährdende Wirkung)**
- **Keimzell-Mutagenität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Karzinogenität**  
Kann Krebs erzeugen.
- **Reproduktionstoxizität** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Spezifische Zielorgan-Toxizität bei einmaliger Exposition**  
Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Spezifische Zielorgan-Toxizität bei wiederholter Exposition**  
Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.
- **Aspirationsgefahr** Aufgrund der verfügbaren Daten sind die Einstufungskriterien nicht erfüllt.

### ABSCHNITT 12: Umweltbezogene Angaben

- **12.1 Toxizität**
- **Aquatische Toxizität:** Keine weiteren relevanten Informationen verfügbar.
- **12.2 Persistenz und Abbaubarkeit** Keine weiteren relevanten Informationen verfügbar.
- **12.3 Bioakkumulationspotenzial** Keine weiteren relevanten Informationen verfügbar.
- **12.4 Mobilität im Boden** Keine weiteren relevanten Informationen verfügbar.
- **Weitere ökologische Hinweise:**
- **Allgemeine Hinweise:**  
Wassergefährdungsklasse 3 (Selbsteinstufung): stark wassergefährdend  
Nicht in das Grundwasser, in Gewässer oder in die Kanalisation gelangen lassen, auch nicht in kleinen Mengen.  
Darf nicht unverdünnt bzw. unneutralisiert ins Abwasser bzw. in den Vorfluter gelangen.  
Trinkwassergefährdung bereits beim Auslaufen geringster Mengen in den Untergrund.
- **12.5 Ergebnisse der PBT- und vPvB-Beurteilung**
- **PBT:** Nicht anwendbar.
- **vPvB:** Nicht anwendbar.

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· 12.6 Andere schädliche Wirkungen Keine weiteren relevanten Informationen verfügbar.

### ABSCHNITT 13: Hinweise zur Entsorgung

- 13.1 Verfahren der Abfallbehandlung
- **Empfehlung:** Darf nicht zusammen mit Hausmüll entsorgt werden. Nicht in die Kanalisation gelangen lassen.
- **Ungereinigte Verpackungen:**
- **Empfehlung:** Entsorgung gemäß den behördlichen Vorschriften.

### ABSCHNITT 14: Angaben zum Transport

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>· 14.1 UN-Nummer</li> <li>· ADR, IMDG, IATA</li> </ul>  | <p style="text-align: right;">UN1789</p>   |
| <ul style="list-style-type: none"> <li>· 14.2 Ordnungsgemäße UN-Versandbezeichnung</li> <li>· ADR</li> <li>· IMDG, IATA</li> </ul>   | <p style="text-align: right;">1789 CHLORWASSERSTOFFSÄURE, Gemisch<br/>HYDROCHLORIC ACID mixture</p>  |
| <ul style="list-style-type: none"> <li>· 14.3 Transportgefahrenklassen</li> <li>· ADR, IMDG, IATA</li> </ul>   | <div style="text-align: center;">  </div> <p style="text-align: right;">8 Ätzende Stoffe<br/>8</p> |
| <ul style="list-style-type: none"> <li>· Klasse</li> <li>· Gefahrzettel</li> </ul>   | <p style="text-align: right;">8 Ätzende Stoffe<br/>8</p>   |
| <ul style="list-style-type: none"> <li>· 14.4 Verpackungsgruppe</li> <li>· ADR, IMDG, IATA</li> </ul>  | <p style="text-align: right;">II</p>   |
| <ul style="list-style-type: none"> <li>· 14.5 Umweltgefahren:</li> </ul>   | <p style="text-align: right;">Nicht anwendbar.</p>   |
| <ul style="list-style-type: none"> <li>· 14.6 Besondere Vorsichtsmaßnahmen für den Verwender</li> <li>· Nummer zur Kennzeichnung der Gefahr (Kemler-Zahl):</li> <li>· EMS-Nummer:</li> <li>· Segregation groups</li> <li>· Stowage Category</li> </ul> | <p style="text-align: right;">Achtung: Ätzende Stoffe<br/>80<br/>F-A,S-B<br/>Strong acids<br/>C</p>  |
| <ul style="list-style-type: none"> <li>· 14.7 Massengutbeförderung gemäß Anhang II des MARPOL-Übereinkommens und gemäß IBC-Code</li> </ul>   | <p style="text-align: right;">Nicht anwendbar.</p>   |
| <ul style="list-style-type: none"> <li>· Transport/weitere Angaben:</li> </ul>   |  |
| <ul style="list-style-type: none"> <li>· ADR</li> <li>· Begrenzte Menge (LQ)</li> <li>· Freigestellte Mengen (EQ)</li> </ul>   | <p style="text-align: right;">1L<br/>Code: E2<br/>Höchste Nettomenge je Innenverpackung: 30 ml<br/>Höchste Nettomenge je Außenverpackung: 500 ml</p>                                 |
| <ul style="list-style-type: none"> <li>· Beförderungskategorie</li> <li>· Tunnelbeschränkungscode</li> </ul>   | <p style="text-align: right;">2<br/>E</p>  |

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- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>· <b>IMDG</b></li> <li>· <b>Limited quantities (LQ)</b></li> <li>· <b>Excepted quantities (EQ)</b></li> </ul> | <ul style="list-style-type: none"> <li>1L</li> <li>Code: E2</li> <li>Maximum net quantity per inner packaging: 30 ml</li> <li>Maximum net quantity per outer packaging: 500 ml</li> </ul> |
| <ul style="list-style-type: none"> <li>· <b>UN "Model Regulation":</b></li> </ul>  | <ul style="list-style-type: none"> <li>UN 1789 CHLORWASSERSTOFFSÄURE, GEMISCH, 8, II</li> </ul>   |

### ABSCHNITT 15: Rechtsvorschriften

- **15.1 Vorschriften zu Sicherheit, Gesundheits- und Umweltschutz/spezifische Rechtsvorschriften für den Stoff oder das Gemisch**
- Richtlinie 2012/18/EU
- **Namentlich aufgeführte gefährliche Stoffe - ANHANG I** Keiner der Inhaltsstoffe ist enthalten.
- **VERORDNUNG (EG) Nr. 1907/2006 ANHANG XVII** Beschränkungsbedingungen: 3, 72
- **Richtlinie 2011/65/EU zur Beschränkung der Verwendung bestimmter gefährlicher Stoffe in Elektro- und Elektronikgeräten – Anhang II**
- Keiner der Inhaltsstoffe ist enthalten.
- **Nationale Vorschriften:**
- **Hinweise zur Beschäftigungsbeschränkung:**  
Arbeitnehmer dürfen den in dieser Zubereitung enthaltenen krebserzeugenden Gefahrstoffen nicht ausgesetzt sein. Im Einzelfall kann die Behörde Ausnahmen zulassen.
- **Wassergefährdungsklasse: WGK 3 (Selbsteinstufung):** stark wassergefährdend.
- **Sonstige Vorschriften, Beschränkungen und Verbotsverordnungen**  
Das Produkt unterliegt der Anlage 2 der Chemikalienverbotsverordnung (ChemVerbotsV) - Anforderungen in Bezug auf die Abgabe
- **15.2 Stoffsicherheitsbeurteilung:** Eine Stoffsicherheitsbeurteilung wurde nicht durchgeführt.

### ABSCHNITT 16: Sonstige Angaben

Die Angaben stützen sich auf den heutigen Stand unserer Kenntnisse, sie stellen jedoch keine Zusicherung von Produkteigenschaften dar und begründen kein vertragliches Rechtsverhältnis.

- **Relevante Sätze**  
H302 Gesundheitsschädlich bei Verschlucken.  
H314 Verursacht schwere Verätzungen der Haut und schwere Augenschäden.  
H318 Verursacht schwere Augenschäden.  
H335 Kann die Atemwege reizen.  
H350 Kann Krebs erzeugen.
- **Abkürzungen und Akronyme:**  
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 Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
VOC: Volatile Organic Compounds (USA, EU)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Acute Tox. 4: Akute Toxizität - oral – Kategorie 4

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*Skin Corr. 1B: Hautreizende/-ätzende Wirkung – Kategorie 1B*  
*Eye Dam. 1: Schwere Augenschädigung/Augenreizung – Kategorie 1*  
*Carc. 1B: Karzinogenität – Kategorie 1B*  
*STOT SE 3: Spezifische Zielorgan-Toxizität (einmalige Exposition) – Kategorie 3*

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DE

**Scheda di dati di sicurezza**  
ai sensi del regolamento 1907/2006/CE, Articolo 31

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### SEZIONE 1: Identificazione della sostanza o della miscela e della società/impresa

· **1.1 Identificatore del prodotto**

· **Denominazione commerciale:** SCHIFF'S REAGENT

· **Articolo numero:** 26052-05, 26774-01, 26853-01, 26052-06, 26920-04

· **UFI:** XAY0-U0E6-5008-AJA5

· **1.2 Usi identificati pertinenti della sostanza o della miscela e usi sconsigliati**  
Non sono disponibili altre informazioni.

· **Utilizzazione della Sostanza / del Preparato** Prodotti chimici per laboratorio

· **1.3 Informazioni sul fornitore della scheda di dati di sicurezza**

· **Produttore/fornitore:**

Electron Microscopy Sciences

1560 Industry Road

USA-Hatfield, PA 19440

Tel: 215-412-8400 Fax: 215-412-8450

email: [sgkcck@aol.com](mailto:sgkcck@aol.com)

[www.emsdiasum.com](http://www.emsdiasum.com)

Societa Italiana Chimici

Via Rio Nell Ellba 140

00138 Rome, Italy

Tel: 39 06 8800211

Fax: 39 30 06 8815313

Web: [www.sichim.com](http://www.sichim.com)

· **Informazioni fornite da:** Product safety department

· **1.4 Numero telefonico di emergenza:**

ChemTrec 1-800-424-9300 Contract CCN7661

1-703-527-3887

### SEZIONE 2: Identificazione dei pericoli

· **2.1 Classificazione della sostanza o della miscela**

· **Classificazione secondo il regolamento (CE) n. 1272/2008**



GHS08 pericolo per la salute

Carc. 1B H350 Può provocare il cancro.



GHS05 corrosione

Skin Corr. 1B H314 Provoca gravi ustioni cutanee e gravi lesioni oculari.

Eye Dam. 1 H318 Provoca gravi lesioni oculari.

· **2.2 Elementi dell'etichetta**

· **Etichettatura secondo il regolamento (CE) n. 1272/2008**

Il prodotto è classificato ed etichettato conformemente al regolamento CLP.

· **Pittogrammi di pericolo**



GHS05



GHS08

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· **Avvertenza Pericolo**· **Componenti pericolosi che ne determinano l'etichettatura:**

cloruro di idrogeno  
4,4'-(4-imminocicloesa-2,5-dienilidenemetilen)dianilina, cloridrato  
disolfito di disodio

· **Indicazioni di pericolo**

H314 Provoca gravi ustioni cutanee e gravi lesioni oculari.  
H350 Può provocare il cancro.

· **Consigli di prudenza**

P303+P361+P353 **IN CASO DI CONTATTO CON LA PELLE (o con i capelli):** togliersi di dosso immediatamente tutti gli indumenti contaminati. Sciacquare la pelle [o fare una doccia].  
P305+P351+P338 **IN CASO DI CONTATTO CON GLI OCCHI:** sciacquare accuratamente per parecchi minuti. Togliere le eventuali lenti a contatto se è agevole farlo. Continuare a sciacquare.  
P310 Contattare immediatamente un CENTRO ANTIVELENI/un medico.  
P321 Trattamento specifico (vedere su questa etichetta).  
P405 Conservare sotto chiave.  
P501 Smaltire il prodotto/recipiente in conformità con le disposizioni locali / regionali / nazionali / internazionali.

· **Ulteriori dati:**

EUH031 A contatto con acidi libera gas tossici.

· **2.3 Altri pericoli**· **Risultati della valutazione PBT e vPvB**

· **PBT:** Non applicabile.

· **vPvB:** Non applicabile.

### SEZIONE 3: Composizione/informazioni sugli ingredienti

· **3.2 Caratteristiche chimiche: Miscela**

· **Descrizione:** Miscela delle seguenti sostanze con additivi non pericolosi.

· **Sostanze pericolose:**

CAS: 7647-01-0 EINECS: 231-595-7	cloruro di idrogeno Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; STOT SE 3, H335	>2,5-≤10%
CAS: 7681-57-4 EINECS: 231-673-0	disolfito di disodio Eye Dam. 1, H318; Acute Tox. 4, H302	>2,5-≤10%
CAS: 569-61-9 EINECS: 209-321-2	4,4'-(4-imminocicloesa-2,5-dienilidenemetilen)dianilina, cloridrato Carc. 1B, H350	≤2,5%

· **Ulteriori indicazioni:** Il testo dell'avvertenza dei pericoli citati può essere appreso dal capitolo 16

### SEZIONE 4: Misure di primo soccorso

· **4.1 Descrizione delle misure di primo soccorso**

· **Indicazioni generali:** Allontanare immediatamente gli abiti contaminati dal prodotto.

· **Inalazione:** Se il soggetto è svenuto provvedere a tenerlo durante il trasporto in posizione stabile su un fianco.

· **Contatto con la pelle:** Lavare immediatamente con acqua e sapone sciacquando accuratamente.

· **Contatto con gli occhi:**

Lavare con acqua corrente per diversi minuti tenendo le palpebre ben aperte e consultare il medico.

· **Ingestione:**

Bere abbondante acqua e sostare in zona ben areata. Richiedere immediatamente l'intervento del medico.

· **4.2 Principali sintomi ed effetti, sia acuti che ritardati** Non sono disponibili altre informazioni.

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- **4.3 Indicazione dell'eventuale necessità di consultare immediatamente un medico e di trattamenti speciali**  
Non sono disponibili altre informazioni.

### **SEZIONE 5: Misure antincendio**

- **5.1 Mezzi di estinzione**
- **Mezzi di estinzione idonei:** Adottare provvedimenti antiincendio nei dintorni della zona colpita.
- **5.2 Pericoli speciali derivanti dalla sostanza o dalla miscela** Non sono disponibili altre informazioni.
- **5.3 Raccomandazioni per gli addetti all'estinzione degli incendi**
- **Mezzi protettivi specifici:** Indossare il respiratore.

### **SEZIONE 6: Misure in caso di rilascio accidentale**

- **6.1 Precauzioni personali, dispositivi di protezione e procedure in caso di emergenza**  
Indossare il respiratore.  
Indossare equipaggiamento protettivo. Allontanare le persone non equipaggiate.
- **6.2 Precauzioni ambientali:** Impedire infiltrazioni nella fognatura/nelle acque superficiali/nelle acque freatiche.
- **6.3 Metodi e materiali per il contenimento e per la bonifica:**  
Raccogliere il liquido con materiale assorbente (sabbia, tripoli, legante di acidi, legante universale, segatura).  
Utilizzare mezzi di neutralizzazione.  
Smaltimento del materiale contaminato conformemente al punto 13.  
Provvedere ad una sufficiente areazione.
- **6.4 Riferimento ad altre sezioni**  
Per informazioni relative ad un manipolazione sicura, vedere capitolo 7.  
Per informazioni relative all'equipaggiamento protettivo ad uso personale vedere Capitolo 8.  
Per informazioni relative allo smaltimento vedere Capitolo 13.

### **SEZIONE 7: Manipolazione e immagazzinamento**

- **7.1 Precauzioni per la manipolazione sicura**  
Accurata ventilazione/aspirazione nei luoghi di lavoro.  
Aprire e manipolare i recipienti con cautela.  
Evitare la formazione di aerosol.
- **Indicazioni in caso di incendio ed esplosione:** Tener pronto il respiratore.
- **7.2 Condizioni per lo stoccaggio sicuro, comprese eventuali incompatibilità**
- **Stoccaggio:**
- **Requisiti dei magazzini e dei recipienti:** Non sono richiesti requisiti particolari.
- **Indicazioni sullo stoccaggio misto:** Immagazzinare separatamente da acidi.
- **Ulteriori indicazioni relative alle condizioni di immagazzinamento:** Mantenere i recipienti ermeticamente chiusi.
- **7.3 Usi finali particolari** Non sono disponibili altre informazioni.

### **SEZIONE 8: Controllo dell'esposizione/protezione individuale**

- **Ulteriori indicazioni sulla struttura di impianti tecnici:** Nessun dato ulteriore, vedere punto 7.

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**· 8.1 Parametri di controllo****· Componenti i cui valori limite devono essere tenuti sotto controllo negli ambienti di lavoro:****7647-01-0 cloruro di idrogeno**TWA Limite Ceiling: 2,9 mg/m<sup>3</sup>, 2 ppm  
A4VL Valore a breve termine: 15 mg/m<sup>3</sup>, 10 ppm  
Valore a lungo termine: 8 mg/m<sup>3</sup>, 5 ppm**7681-57-4 disolfito di disodio**TWA Valore a lungo termine: 5 mg/m<sup>3</sup>  
A4**· Ulteriori indicazioni:** Le liste valide alla data di compilazione sono state usate come base.**· 8.2 Controlli dell'esposizione****· Mezzi protettivi individuali:****· Norme generali protettive e di igiene del lavoro:**

Tenere lontano da cibo, bevande e foraggi.

Togliere immediatamente gli abiti contaminati.

Lavarsi le mani prima dell'intervallo o a lavoro terminato.

Custodire separatamente l'equipaggiamento protettivo.

Evitare il contatto con gli occhi.

Evitare il contatto con gli occhi e la pelle.

**· Maschera protettiva:**

Nelle esposizioni brevi e minime utilizzare la maschera; nelle esposizioni più intense e durature indossare l'autorespiratore.

**· Guanti protettivi:**

Guanti protettivi

Il materiale dei guanti deve essere impermeabile e stabile contro il prodotto/ la sostanza/ la formulazione.

A causa della mancanza di tests non può essere consigliato alcun tipo di materiale per i guanti con cui manipolare il prodotto / la formulazione / la miscela di sostanze chimiche.

Scelta del materiale dei guanti in considerazione dei tempi di passaggio, dei tassi di permeazione e della degradazione.

**· Materiale dei guanti**

La scelta dei guanti adatti non dipende soltanto dal materiale bensì anche da altre caratteristiche di qualità variabili da un produttore a un altro. Poiché il prodotto rappresenta una formulazione di più sostanze, la stabilità dei materiali dei guanti non è calcolabile in anticipo e deve essere testata prima dell'impiego

**· Tempo di permeazione del materiale dei guanti**

Richiedere dal fornitore dei guanti il tempo di passaggio preciso il quale deve essere rispettato.

**· Occhiali protettivi:**

Occhiali protettivi a tenuta

IT

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**Scheda di dati di sicurezza**  
ai sensi del regolamento 1907/2006/CE, Articolo 31

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### SEZIONE 9: Proprietà fisiche e chimiche

#### · 9.1 Informazioni sulle proprietà fisiche e chimiche fondamentali

##### · Indicazioni generali

· Aspetto:

· Forma:

Liquido

· Colore:

Chiaro

· Odore:

Forte

· Soglia olfattiva:

Non definito.

· valori di pH a 20 °C:

2

##### · Cambiamento di stato

· Punto di fusione/punto di congelamento:

Non definito.

· Punto di ebollizione iniziale e intervallo di ebollizione: Non definito.

· Punto di infiammabilità:

Non applicabile.

· Infiammabilità (solidi, gas):

Non applicabile.

· Temperatura di decomposizione:

Non definito.

· Temperatura di autoaccensione:

Prodotto non autoinfiammabile.

· Proprietà esplosive:

Prodotto non esplosivo.

##### · Limiti di infiammabilità:

· Inferiore:

Non definito.

· Superiore:

Non definito.

· Tensione di vapore a 20 °C:

23 hPa

· Densità:

Non definito.

· Densità relativa

Non definito.

· Densità di vapore:

Non definito.

· Velocità di evaporazione

Non definito.

· Solubilità in/Miscibilità con

· acqua:

Poco e/o non miscibile.

· Coefficiente di ripartizione: n-ottanolo/acqua:

Non definito.

· Viscosità:

· Dinamica:

Non definito.

· Cinematica:

Non definito.

· Tenore del solvente:

· Acqua:

89,0 %

· VOC (CE)

0,00 %

· Contenuto solido:

0,0 %

· 9.2 Altre informazioni

Non sono disponibili altre informazioni.

### SEZIONE 10: Stabilità e reattività

· 10.1 Reattività Non sono disponibili altre informazioni.

· 10.2 Stabilità chimica

· Decomposizione termica/ condizioni da evitare: Il prodotto non si decompone se utilizzato secondo le norme.

· 10.3 Possibilità di reazioni pericolose Il contatto con acidi libera gas tossici.

· 10.4 Condizioni da evitare Non sono disponibili altre informazioni.

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**Scheda di dati di sicurezza**  
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- **10.5 Materiali incompatibili:** Non sono disponibili altre informazioni.
- **10.6 Prodotti di decomposizione pericolosi:** Non sono noti prodotti di decomposizione pericolosi.

### **SEZIONE 11: Informazioni tossicologiche**

- **11.1 Informazioni sugli effetti tossicologici**
- **Tossicità acuta** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Irritabilità primaria:**
- **Corrosione/irritazione cutanea**  
Provoca gravi ustioni cutanee e gravi lesioni oculari.
- **Lesioni oculari gravi/irritazioni oculari gravi**  
Provoca gravi lesioni oculari.
- **Sensibilizzazione respiratoria o cutanea**  
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Effetti CMR (cancerogenicità, mutagenicità e tossicità per la riproduzione)**
- **Mutagenicità delle cellule germinali**  
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Cancerogenicità**  
Può provocare il cancro.
- **Tossicità per la riproduzione** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Tossicità specifica per organi bersaglio (STOT) - esposizione singola**  
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Tossicità specifica per organi bersaglio (STOT) - esposizione ripetuta**  
Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.
- **Pericolo in caso di aspirazione** Basandosi sui dati disponibili i criteri di classificazione non sono soddisfatti.

### **SEZIONE 12: Informazioni ecologiche**

- **12.1 Tossicità**
- **Tossicità acquatica:** Non sono disponibili altre informazioni.
- **12.2 Persistenza e degradabilità** Non sono disponibili altre informazioni.
- **12.3 Potenziale di bioaccumulo** Non sono disponibili altre informazioni.
- **12.4 Mobilità nel suolo** Non sono disponibili altre informazioni.
- **Ulteriori indicazioni in materia ambientale:**
- **Ulteriori indicazioni:**  
Pericolosità per le acque classe 3 (D) (Autoclassificazione): molto pericoloso  
Non immettere nelle acque freatiche, nei corsi d'acqua o nelle fognature, anche in piccole dosi.  
Non immettere il prodotto non diluito o non neutralizzato nelle acque di scarico e nei canali di raccolta.  
Pericolo per le acque potabili anche in caso di perdite nel sottosuolo di quantità minime di prodotto.
- **12.5 Risultati della valutazione PBT e vPvB**
- **PBT:** Non applicabile.
- **vPvB:** Non applicabile.
- **12.6 Altri effetti avversi** Non sono disponibili altre informazioni.

### **SEZIONE 13: Considerazioni sullo smaltimento**

- **13.1 Metodi di trattamento dei rifiuti**
- **Consigli:** Non smaltire il prodotto insieme ai rifiuti domestici Non immettere nelle fognature.

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**Scheda di dati di sicurezza**  
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- **Imballaggi non puliti:**
- **Consigli:** Smaltimento in conformità con le disposizioni amministrative.

### SEZIONE 14: Informazioni sul trasporto

- **14.1 Numero ONU**
- **ADR, IMDG, IATA**

UN1789

- **14.2 Nome di spedizione dell'ONU**

- **ADR**
- **IMDG, IATA**

1789 ACIDO CLORIDRICO miscela  
HYDROCHLORIC ACID mixture

- **14.3 Classi di pericolo connesso al trasporto**

- **ADR, IMDG, IATA**



- **Classe**
- **Etichetta**

8 Materie corrosive  
8

- **14.4 Gruppo di imballaggio**

- **ADR, IMDG, IATA**

II

- **14.5 Pericoli per l'ambiente:**

Non applicabile.

- **14.6 Precauzioni speciali per gli utilizzatori**

- **N° identificazione pericolo (Numero Kemler):**
- **Numero EMS:**
- **Segregation groups**
- **Stowage Category**

Attenzione: Materie corrosive  
80  
F-A,S-B  
Strong acids  
C

- **14.7 Trasporto di rifiuti secondo l'allegato II di MARPOL ed il codice IBC**

Non applicabile.

- **Trasporto/ulteriori indicazioni:**

- **ADR**

- **Quantità limitate (LQ)**
- **Quantità esenti (EQ)**

1L  
Codice: E2  
Quantità massima netta per imballaggio interno: 30 ml  
Quantità massima netta per imballaggio esterno: 500 ml

- **Categoria di trasporto**

2

- **Codice di restrizione in galleria**

E

- **IMDG**

- **Limited quantities (LQ)**
- **Excepted quantities (EQ)**

1L  
Code: E2  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 500 ml

- **UN "Model Regulation":**

UN 1789 ACIDO CLORIDRICO MISCELA, 8, II

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**Scheda di dati di sicurezza**  
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### SEZIONE 15: Informazioni sulla regolamentazione

· **15.1 Disposizioni legislative e regolamentari su salute, sicurezza e ambiente specifiche per la sostanza o la miscela**

· **Direttiva 2012/18/UE**

· **Sostanze pericolose specificate - ALLEGATO I** Nessuno dei componenti è contenuto.

· **REGOLAMENTO (CE) n. 1907/2006 ALLEGATO XVII** Restrizioni: 3, 72

· **Direttiva 2011/65/UE sulla restrizione dell'uso di determinate sostanze pericolose nelle apparecchiature elettriche ed elettroniche - Allegato II**

Nessuno dei componenti è contenuto.

· **Disposizioni nazionali:**

· **Indicazioni relative alla limitazione delle attività lavorative:**

*Il personale non deve essere esposto alle sostanze cancerogene contenute in questo preparato L'autorità può ammettere nei singoli casi delle eccezioni.*

· **15.2 Valutazione della sicurezza chimica:** Una valutazione della sicurezza chimica non è stata effettuata.

### SEZIONE 16: Altre informazioni

*I dati sono riportati sulla base delle nostre conoscenze attuali, non rappresentano tuttavia alcuna garanzia delle caratteristiche del prodotto e non motivano alcun rapporto giuridico contrattuale.*

· **Frasei rilevanti**

H302 Nocivo se ingerito.

H314 Provoca gravi ustioni cutanee e gravi lesioni oculari.

H318 Provoca gravi lesioni oculari.

H335 Può irritare le vie respiratorie.

H350 Può provocare il cancro.

· **Abbreviazioni e acronimi:**

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 Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Tossicità acuta per via orale – Categoria 4

Skin Corr. 1B: Corrosione/irritazione della pelle – Categoria 1B

Eye Dam. 1: Gravi lesioni oculari/irritazione oculare – Categoria 1

Carc. 1B: Cancerogenicità – Categoria 1B

STOT SE 3: Tossicità specifica per organi bersaglio (esposizione singola) – Categoria 3

# 물질안전보건자료 GHS에 따라

인쇄일자: 2021.10.07

개정: 2021.10.07

## 1 화학제품과 회사에 관한 정보

- **제품 식별자**
- **제품명: SCHIFF'S REAGENT**
- **상품번호:** 26052-05, 26774-01, 26853-01, 26052-06, 26920-04
- **해당 순물질이나 혼합물의 관련 하위용도 및 사용금지용도** 추가적인 정보가 존재하지 않습니다.
- **제품의 권고 용도와 사용상의 제한:** 실험실화학품
- **안전데이터표(Safety Data Sheet)내 공급업체 관련 상세 정보**
- **제조자/수입자/유통업자 정보:**  
 Electron Microscopy Sciences  
 1560 Industry Road  
 USA-Hatfield, PA 19440  
 Tel: 215-412-8400 Fax: 215-412-8450  
 email: sgkcck@aol.com  
 www.emsdiasum.com  
  
 Samchang Commercial Co., Ltd.  
 Yeo Eui Do  
 PO Box 1110  
 Seoul, Korea  
 Tel: 82 2 703 3040  
 Fax: 82 2 717 3298  
  
 -----  
 Daedok Science, Co. Ltd.  
 34141 E10 Korea Advanced Institute of Science  
 Guseong-Dong, Yuseong-gu, Daejeon,  
 Korea  
 Phone: 82 42 710 2091  
 Fax: 82 42 367 0005  
 Website: www.labsmro.com
- **추가적인 정보 획득 가능:** Product safety department
- **비상연락 전화번호:**  
 ChemTrec 1-800-424-9300 Contract CCN7661  
 1-703-527-3887

## 2 유해성·위험성

- **순물질 또는 혼합물의 분류**



건강에 위험

발암성 - 구분 1B

H350 암을 일으킬 수 있음



부식

피부 부식성/피부 자극성 - 구분 1 H314 피부에 심한 화상과 눈에 손상을 일으킴

심한 눈 손상성/눈 자극성 - 구분 1 H318 눈에 심한 손상을 일으킴

- **라벨표기 요소**

- **GHS 라벨 요소**

본 제품은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.

(2 쪽에 계속)

# 물질안전보건자료

## GHS에 따라

인쇄일자: 2021.10.07

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**제품명: SCHIFF'S REAGENT**

(1 쪽부터계속)

**· 그림문자**



GHS05 GHS08

**· 신호어 위험**

**· 상표상에명확히위험성이표시된성분:**

염산  
4,4'-(4-iminocyclohexa-2,5-dienylidenemethylene)dianiline hydrochloride  
sodium metabisulphite

**· 유해.위험 문구**

피부에 심한 화상과 눈에 손상을 일으킴  
암을 일으킬 수 있음

**· 예방조치 문구**

피부(또는 머리카락)에 묻으면 오염된 모든 의복은 벗거나 제거하십시오. 피부를 물로 씻으시오/샤워하십시오

눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면 콘택트렌즈를 제거하십시오. 계속 씻으시오.  
즉시 독성물질센터/병원 연락 필요.

(라벨 참조) 처치를 하시오.

밀봉하여 저장하십시오.

(지방/지역/국가/국제 규정에 따라) 에 내용물/용기를 폐기하십시오.

**· 기타 유해성**

· PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과

· PBT(잔류성, 생물농축성, 독성 물질): 해당사항 없음.

· vPvB(고 잔류성, 고 생물농축성 물질): 해당사항 없음.

### 3 구성성분의 명칭 및 함유량

**· 화학적 특성: 혼합물**

· 설명: 무해한 첨가물이 함유된 아래에 열거된 물질로 만들어진 혼합물.

**· 위험요소:**

7647-01-0	염산 ⚠ 피부 부식성/피부 자극성 - 구분 1, H314; 심한 눈 손상성/눈 자극성 - 구분 1, H318; ⚠ 급성 독성 - 경구 - 구분 4, H302; 특정표적장기 독성 - 1회 노출 - 구분 3, H335	>2.5-≤10%
7681-57-4	sodium metabisulphite ⚠ 심한 눈 손상성/눈 자극성 - 구분 1, H318; ⚠ 급성 독성 - 경구 - 구분 4, H302	>2.5-≤10%
569-61-9	4,4'-(4-iminocyclohexa-2,5-dienylidenemethylene)dianiline hydrochloride ⚠ 발암성 - 구분 1B, H350	≤2.5%

### 4 응급조치 요령

**· 응급조치요령 내용**

· **일반적 정보:** 이 제품에 의해 오염된 의상은 즉시 제거한다.

· **흡입했을 때:** 환자가 의식을 잃었을 경우에는 안전한 자세에서 환자를 운반한다.

· **피부에 접촉했을 때:** 즉시 물과 비누로 씻고 잘 행군다.

· **눈에 들어갔을 때:** 흐르는 물에 눈을 몇분동안 씻어내고 나서, 의사와 상담한다

· **먹었을 때:** 물을 충분히 마시고 신선한 공기를 쐬다. 즉시 의사의 도움을 구한다.

(3 쪽에계속)

# 물질안전보건자료

## GHS에 따라

인쇄일자: 2021.10.07

개정: 2021.10.07

**제품명: SCHIFF'S REAGENT**

(2 쪽부터계속)

- 기타 의사의 주의사항:
- 가장 중요한 급·만성 증상 및 영향 추가적인 정보가 존재하지 않습니다.
- 즉각적인 의료처치 및 특별치료가 필요함을 시사하는 징후 추가적인 정보가 존재하지 않습니다.

### 5 폭발·화재시 대처방법

- 소화제
- 적절한 소화제: 주 변 환 경에 맞는 화 재 진 화방법을 사용한다.
- 본 화학물질이나 혼합물에서 발생하는 특별 유해성 추가적인 정보가 존재하지 않습니다.
- 소방관에 대한 권고사항
- 화재 진압 시 착용할 보호구 및 예방조치: 호흡보호장비설치.

### 6 누출 사고 시 대처방법

- 개인적 예방조치, 보호장비 및 응급처치 절차  
호흡안전장비설치.  
안전장비착용하고, 무 방 비 의 사 람 은 격 리 시킨다.
- 환경 관련 예방조치: 하수도망/해수면위의물/지하수로도달하지않게한다.
- 밀폐 및 정화 방법과 소재:  
액체가 혼합된 물질(모래, 규조토, 산성결합물, 일반결합물, 톱밥)에 흡입되도록 한다.  
중성제를사용한다.  
항목 13에 따라 오염된 물질을 쓰레기로 처분한다.  
충분한 환기가 되도록 한다.
- 타 섹션 참조  
안전관리에 대한 정보는 제7 장 을 참고하시오.  
개인보호장비에 대한 정보는 제8 장 을 참고하시오.  
쓰레기처리에 대한 정보는 제13 장 을 참고하시오.

### 7 취급 및 저장방법

- 취급:  
· 안전 취급을 위한 예방조치  
작업장에서는통풍이잘되고/습기제거가잘되게주의한다.  
조심스럽게용기를개봉하거나취급한다.  
연무질이형성되는것을피한다.
- 화재 및 폭발 사고 예방대책에 관한 정보: 호흡보호장비를항상비치한다.
- 혼합위험성 등 안전 저장 조건
- 보관:  
· 안전한 저장 방법: 특 별 한 요구사항이 없음.  
· 하나의 공동 보관 시설에 대한 보관 관련 정보: 산 성 이 있 는 것 과 는 함 께 보 관 하 지 마 시 오.  
· 보관 조건에 관한 추가적인 정보: 용기를새지않게밀폐한채보관한다.  
· 구체적인 최종 사용자 추가적인 정보가 존재하지 않습니다.

### 8 누출방지 및 개인보호구

- 첨단시설 디자인에 대한 추가정보: 더 이상 의 자료는 없음. 항 목 7 을 참고하시오.

(4 쪽에계속)



# 물질안전보건자료

## GHS에 따라

인쇄일자: 2021.10.07

개정: 2021.10.07

**제품명: SCHIFF'S REAGENT**

(3 쪽부터계속)

**통제 변수**

**· 화학물질의 노출기준, 생물학적 노출기준 등:**

**7647-01-0 염산**

TLV (KR)	단기간의값: 2 ppm 장기간의값: 1 ppm
IOELV (EU)	단기간의값: 15 mg/m <sup>3</sup> , 10 ppm 장기간의값: 8 mg/m <sup>3</sup> , 5 ppm
PEL (US)	최고노출기준: 7 mg/m <sup>3</sup> , 5 ppm
REL (US)	최고노출기준: 7 mg/m <sup>3</sup> , 5 ppm
TLV (US)	최고노출기준: 2.98 mg/m <sup>3</sup> , 2 ppm

**7681-57-4 sodium metabisulphite**

TLV (KR)	장기간의값: 5 mg/m <sup>3</sup>
REL (US)	장기간의값: 5 mg/m <sup>3</sup>
TLV (US)	장기간의값: 5 mg/m <sup>3</sup>

**· 추가 정보:** 제조할 당시에 유효한 목록을 기초로 사용했다.

**· 노출 통제**

**· 개인 보호구**

**· 일반적보호조치및위생조치:**

- 식료품, 음료수와 사료로부터 멀리 떨어져 두어 놓는다.
- 더러워지거나 음료수가 묻은 옷은 즉시 탈의한다.
- 휴식 전이나 작업이 끝날때마다 손을 씻는다.
- 방호복은 따로 보관한다.
- 눈과의 접촉을 피한다.
- 눈과 피부와의 접촉을 피한다.

**· 호흡기 보호:**

단시간 또는 경미한 오염의 경우에는 호흡여과기를 사용한다. 심각한 또는 장기간 노출시에는 호흡보호장비를 사용한다.

**· 손 보호:**



보호용 장갑

장갑재질은 제품 / 원료 / 조제를 투과시키지 않아야 하고, 내구성이 있어야 한다.  
테스트를 하지 않았기 때문에 제품 / 조제 / 화학 혼합물에 적합한 장갑재질에 대한 추천이 없다.  
투과 시간, 침투율과 저하를 고려해서 장갑 재료를 선택한다.

**· 장갑의 재료**

적합한 장갑의 선정은 재질 차이뿐만 아니라 품질 기준의 차이도 고려하여 이루어져야 하고 제조업종에 따라서도 다르게 선정되어야 한다. 제품은 다양한 재료로부터의 조제로 이루어지는 것이기 때문에, 장갑재질의 안정성은 사전에 예측되어질 수 있는 것이 아니고, 반드시 사용 전에 (그 안전성이) 체크되어야 한다.

**· 장갑 재료의 투과 시간** 정확한 관통 시간은 보호장갑 제조자에 의하여 인지되고, 준수되어야 한다.

**· 눈 보호:**



확조이는 보안경

KR

(5 쪽에 계속)

# 물질안전보건자료

## GHS에 따라

인쇄일자: 2021.10.07

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**제품명: SCHIFF'S REAGENT**

(4 쪽부터계속)

### 9 물리화학적 특성

<ul style="list-style-type: none"> <li>· 기본 물리 및 화학적 특성에 대한 정보</li> <li>· 일반정보</li> <li>· 외형</li> <li>· 물리적 상태: 액체</li> <li>· 색: 밝은</li> <li>· 냄새: 강력한</li> <li>· 후각역치: 알맞지않다.</li> </ul>	
· pH 의경우 20 °C:	2
<ul style="list-style-type: none"> <li>· 상태변화</li> <li>· 녹는점/어는점: 맞지않는</li> <li>· 초기 끓는점과 끓는점 범위: 맞지않는</li> </ul>	
· 인화점:	해당사항 없음.
· 인화성(고체, 기체):	해당사항 없음.
· 분해 온도:	알맞지않다.
· 자기점화:	이제품은자연발화성이없다.
· 폭발위험:	이제품은폭발위험성이없다
<ul style="list-style-type: none"> <li>· 인화 또는 폭발 범위의 상한/하한</li> <li>· 아래로: 알맞지않다.</li> <li>· 위로: 알맞지않다.</li> </ul>	
· 증기압 의경우 20 °C:	23 hPa
<ul style="list-style-type: none"> <li>· 밀도: 맞지않는다.</li> <li>· 비중: 알맞지않다.</li> <li>· 증기밀도: 알맞지않다.</li> <li>· 증발 속도: 알맞지않다.</li> </ul>	
<ul style="list-style-type: none"> <li>· 용해도:</li> <li>· 물: 각각의경우에따라서는거의혼합할수없는</li> </ul>	
· n 옥탄올/물 분배계수:	알맞지않다.
<ul style="list-style-type: none"> <li>· 점도:</li> <li>· 역학적 점도: 알맞지않다.</li> <li>· 동점성: 알맞지않다.</li> </ul>	
<ul style="list-style-type: none"> <li>· 용매내용물</li> <li>· 물: 89.0 %</li> <li>· VOC (EU): 0.00 %</li> </ul>	
<ul style="list-style-type: none"> <li>· 고체의 함량: 0.0 %</li> <li>· 기타 정보: 추가적인 정보가 존재하지 않습니다.</li> </ul>	

### 10 안정성 및 반응성

- 반응성 추가적인 정보가 존재하지 않습니다.
- 화학적 안정성
- 화학적 안정성 및 유해 반응의 가능성 / 피해야 할 조건: 규정에따라사용할경우해체는없다
- 유해반응 가능성 산과접촉시독가스가방출된다.
- 피해야 할 조건 추가적인 정보가 존재하지 않습니다.

(6 쪽에계속)

# 물질안전보건자료

## GHS에 따라

인쇄일자: 2021.10.07

개정: 2021.10.07

**제품명: SCHIFF'S REAGENT**

(5 쪽부터계속)

- **혼합 금지 물질:** 추가적인 정보가 존재하지 않습니다.
- **유해분해물질:** 위험성있는분해물들은알려지지않았다.

### 11 독성에 관한 정보

- **독성학적 영향에 대한 정보**
- **급성 독성:**
- **일차적 자극 효과:**
- **피부 부식성 또는 자극성:** 피부와점막에강한부식작용.
- **심한 눈 손상 또는 자극성:**  
강한부식작용  
심각한안구상처의위험이있는강한자극
- **감각화:** 민감한영향이없는것으로알려져있다.
- **추가적인 독성에 관한 정보:**  
이제품은유럽공동체의공동분류원칙의합법적인절차에근거하여최근에발효된원고에서아래위험들의사전준비에대하여제시하고있다.  
부식작용의  
자극적인  
삼킬경우식도나위등의내장기관벽에상처를주는위험과마찬가지로입주변이나구강에강한부식작용을한다  
암을유발하는
- **다음 종류의 잠재적인 효과에 대한 정보**
- **CMR-효과 (암 유발, 돌연변이성 그리고 생식 독성)**  
발암성 - 구분 1B

### 12 환경에 미치는 영향

- **독성**
- **수생독성:** 추가적인 정보가 존재하지 않습니다.
- **지속성 및 분해성** 추가적인 정보가 존재하지 않습니다.
- **환경 시스템에서의 행동:**
- **생물농축 잠재성** 추가적인 정보가 존재하지 않습니다.
- **토양내 이동성** 추가적인 정보가 존재하지 않습니다.
- **추가적인 생태학 정보:**
- **일반 특징:**  
수질오염등급 3 (자체등급분류): 심하게수질오염이된  
지하수나, 하천으로또는하수도망에도달하지않게한다. 역시극소수의양이라도안된다.  
희석시키지않은채또는중화시키지않은채하수도나배수로에도달하지않게해야한다.  
지하수로아주미세한양이유입되었을경우엔이미식수오염상태이다
- **PBT(잔류성, 생물농축성, 독성 물질) 및 vPvB(고 잔류성, 고 생물농축성 물질) 평가 결과**
- **PBT(잔류성, 생물농축성, 독성 물질):** 해당사항 없음.
- **vPvB(고 잔류성, 고 생물농축성 물질):** 해당사항 없음.
- **기타 부작용** 추가적인 정보가 존재하지 않습니다.

### 13 폐기시 주의사항

- **폐기물 처리 방법**
- **권고:** 생활쓰레기와함께처리되어서는안된다. 하수도망으로유입되어서는안된다.

(7 쪽에계속)

# 물질안전보건자료

## GHS에 따라

인쇄일자: 2021.10.07


개정: 2021.10.07

**제품명: SCHIFF'S REAGENT**

(6 쪽부터계속)

- 비위생적 포장:
- 권고: 당국의지침에입각한쓰레기처리.

### 14 운송에 필요한 정보

<ul style="list-style-type: none"> <li>· 유엔 번호</li> <li>· ADR, IMDG, IATA</li> </ul>	<p style="text-align: center;">UN1789</p>
<ul style="list-style-type: none"> <li>· UN 적정 선적명</li> <li>· ADR</li> <li>· IMDG, IATA</li> </ul>	<p style="text-align: center;">1789 HYDROCHLORIC ACID mixture HYDROCHLORIC ACID mixture</p>
<ul style="list-style-type: none"> <li>· 교통 위험 클래스</li> <li>· ADR, IMDG, IATA</li> </ul>	<div style="text-align: center;">  </div>
<ul style="list-style-type: none"> <li>· 등급</li> <li>· 위험물 라벨</li> </ul>	<p style="text-align: center;">8 부식작용하는물질 8</p>
<ul style="list-style-type: none"> <li>· 용기등급</li> <li>· ADR, IMDG, IATA</li> </ul>	<p style="text-align: center;">II</p>
<ul style="list-style-type: none"> <li>· 환경적 유해물질:</li> </ul>	<p style="text-align: center;">해당사항 없음.</p>
<ul style="list-style-type: none"> <li>· 이용자 특별 예방조치</li> <li>· 위험 코드:</li> <li>· EMS-번호:</li> <li>· Segregation groups</li> <li>· Stowage Category</li> </ul>	<p style="text-align: center;">경고: 부식작용하는물질 80 F-A,S-B Strong acids C</p>
<ul style="list-style-type: none"> <li>· MARPOL73/78(선박으로부터의 해양오염방지협약) 부속서2 및 IBC Code(국제선적화물코드)에 따른 벌크(bulk) 운송</li> </ul>	<p style="text-align: center;">해당사항 없음.</p>
<ul style="list-style-type: none"> <li>· 운 송/추가 정보:</li> </ul>	<hr style="border-top: 1px dashed #000;"/>
<ul style="list-style-type: none"> <li>· ADR</li> <li>· 한정 수량 (LQ)</li> <li>· Excepted quantities (EQ)</li> </ul>	<p style="text-align: center;">1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml</p>
<ul style="list-style-type: none"> <li>· 운송 구분</li> <li>· 터널 제한 코드</li> </ul>	<p style="text-align: center;">2 E</p> <hr style="border-top: 1px dashed #000;"/>
<ul style="list-style-type: none"> <li>· IMDG</li> <li>· Limited quantities (LQ)</li> <li>· Excepted quantities (EQ)</li> </ul>	<p style="text-align: center;">1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml</p>
<ul style="list-style-type: none"> <li>· UN "모범 규제":</li> </ul>	<p style="text-align: center;">UN 1789 HYDROCHLORIC ACID MIXTURE, 8, II</p>

-KR

(8 쪽에계속)

# 물질안전보건자료

## GHS에 따라

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**제품명: SCHIFF'S REAGENT**

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### 15 법적 규제현황

· 산업안전보건법에 의한 규제:

· 제조 등 금지물질:

어떠한내용물도목록화되어있지않다

· 허가대상물질:

어떠한내용물도목록화되어있지않다

· 관리대상유해물질:

7647-01-0 염산

· 작업환경측정 대상 유해인자

7647-01-0 염산

1C12

· 특수건강진단 대상 유해인자

7647-01-0 염산

1C5

· 해당 순물질 또는 혼합물에 대한 안전, 보건 및 환경 규제/법률

· Korean Existing Chemical Inventory

7732-18-5 물

KE-35400

7647-01-0 염산

KE-20189

7681-57-4 sodium metabisulphite

KE-12701

· 화학물질관리법

· 사고대비물질

7647-01-0 염산

· 금지물질

어떠한내용물도목록화되어있지않다

· 제한물질

어떠한내용물도목록화되어있지않다

· 유독물질

7647-01-0 염산

· 허가물질

7647-01-0 염산

· 등록 또는 신고 면제대상 화학물질

7732-18-5 물

· ‘21년까지 등록하여야 할 암, 돌연변이, 생식능력 이상을 일으키거나 일으킬 우려가 있는 기존화학물질

어떠한내용물도목록화되어있지않다

· 중점관리물질의 지정

· 표1 중점관리물질(제2조 관련)

어떠한내용물도목록화되어있지않다

· 표2 중점관리물질(제2조 관련)

어떠한내용물도목록화되어있지않다

· GHS 라벨 요소

본 제품은 화학물질의 분류 및 표기에 관한 국제조화시스템(GHS)에 따라 분류 및 표기되었습니다.

(9 쪽에계속)

# 물질안전보건자료 GHS에 따라

인쇄일자: 2021.10.07

개정: 2021.10.07

**제품명: SCHIFF'S REAGENT**

(8 쪽부터계속)

· **그림문자**



GHS05 GHS08

· **신호어 위험**

· **상표상에명확히위험성이표시된성분:**

염산  
4,4'-(4-iminocyclohexa-2,5-dienylidenemethylene)dianiline hydrochloride  
sodium metabisulphite

· **유해.위험 문구**

피부에 심한 화상과 눈에 손상을 일으킴  
암을 일으킬 수 있음

· **예방조치 문구**

피부(또는 머리카락)에 묻으면 오염된 모든 의복은 벗거나 제거하십시오. 피부를 물로 씻으시오/샤워하십시오.  
.  
눈에 묻으면 몇 분간 물로 조심해서 씻으시오. 가능하면 콘택트렌즈를 제거하십시오. 계속 씻으시오.  
즉시 독성물질센터/병원 연락 필요.  
(라벨 참조) 처치를 하시오.  
밀봉하여 저장하십시오.  
(지방/지역/국가/국제 규정에 따라) 에 내용물/용기를 폐기하십시오.

· **국내규정:**

· **사용제한에 대한 정보:**

노동자들은이러한예방준비하에암을유발시키는성분을함유한위험물을버리지말아야한다. 개별적인경우에관청은예외를허가할수있다.

· **화학물질 안전성 평가:** 화학물질 안전성 평가가 수행되지 않음

## 16 그 밖의 참고사항

이보고는우리지식에대한오늘날의상태에대하여평가하고있다, 하지만이보고서는생산특성에관한보증은기술하지않았으며계약적인법률관계에기반을두고있지도않다

· **최초 작성일자:** 2021.10.07

· **개정 횟수 및 최종 개정일자:** 1 / 2021.10.07

· **약어와 두문자어:**

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  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
VOC: Volatile Organic Compounds (USA, EU)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative

# Helaiian Data Keselamatan menurut P.U.(A) 310/2013

Tarikh cetak 07.10.2021

Disemak semula pada 07.10.2021

## 1 Pengenalan bahan kimia berbahaya dan pembekal

- **Pengenal pasti produk**
- **Nama dagang:** SCHIFF'S REAGENT
- **Nombor artikel:** 26052-05, 26774-01, 26853-01, 26052-06, 26920-04
- **Kegunaan yang disarankan bagi bahan dan sekatan penggunaan** Tiada maklumat lanjut yang diperoleh.
- **Penggunaan bahan/sediaan** Bahan kimia makmal
- **Perincian pembekal risalah data keselamatan**
- **Pengilang/Pembekal:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: [sgkcck@aol.com](mailto:sgkcck@aol.com)  
[www.emsdiasum.com](http://www.emsdiasum.com)
- **Maklumat lanjut dapat diperoleh daripada:** Product safety department
- **Nombor telefon kecemasan:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

## 2 Pengenalan bahaya

- **Pengelasan bahan atau campuran**



Bahaya kesihatan

Kars. 1B H350 Boleh menyebabkan kanser.



Kakisan

Skin Corr. 1 H314 Menyebabkan lecuran kulit dan kerosakan mata yang teruk.

Kros. Mata 1 H318 Menyebabkan kerosakan mata yang serius.

- **Melabelkan unsur**
- **Unsur label GHS** Produk ini dikelaskan dan dilabelkan menurut Sistem Terharmoni Global (GHS).
- **Piktogram bahaya**



GHS05



GHS08

- **Kata isyarat Bahaya**
- **Komponen pelabelan yang menentukan bahaya:**  
asid hidroklorik, larutan akueus  
4,4'-(4-iminocyclohexa-2,5-dienyildenemethylene)dianiline hydrochloride  
natrium metabisulfit
- **Pernyataan Bahaya**  
Menyebabkan lecuran kulit dan kerosakan mata yang teruk.  
Boleh menyebabkan kanser.

(Bersambung ke halaman 2)

## Helaian Data Keselamatan menurut P.U.(A) 310/2013

Tarikh cetak 07.10.2021

Disemak semula pada 07.10.2021

**Nama dagang: SCHIFF'S REAGENT**

(Sambungan halaman 1)

- **Pernyataan Berjaga-jaga**  
**JIKA TERKENA KULIT** (atau rambut): Segera tanggalkan/buka semua pakaian yang tercemar. Basuh kulit dengan air/pancuran air.  
**JIKA TERKENA MATA:** Bilas berhati-hati dengan air selama beberapa minit. Tanggalkan kanta lekap, jika ada dan dapat dilakukan dengan mudah. Teruskan membilas.  
 Segera hubungi PUSAT RACUN/doktor.  
 Rawatan khas (lihat label ini).  
 Simpan di tempat berkunci.  
 Lupuskan kandungan/bekas menurut peraturan tempatan/wilayah/kebangsaan/antarabangsa.
- **Bahaya lain**
- **Keputusan penilaian PBT dan vPvB**
- **PBT:** Tidak berkenaan
- **vPvB:** Tidak berkenaan

### 3 Komposisi dan maklumat mengenai ramuan bahan kimia berbahaya

- **Ciri kimia: Campuran**
- **Keterangan:** Campuran bahan disenaraikan di bawah bersama dengan bahan tambah tidak berbahaya.

· **Komponen berbahaya :**

7647-01-0	asid hidroklorik, larutan akueus Skin Corr. 1, H314; Kros. Mata 1, H318;  Toks. Akut 4, H302; STOT SE 3, H335	>2.5-≤10%
7681-57-4	natrium metabisulfit Kros. Mata 1, H318;  Toks. Akut 4, H302	>2.5-≤10%
569-61-9	4,4'-(4-iminocyclohexa-2,5-dienylidene)methylene)dianiline hydrochloride Kars. 1B, H350	≤2.5%

### 4 Langkah-langkah pertolongan cemas

- **Keterangan langkah pertolongan cemas**
- **Maklumat am:** Segera tanggalkan mana-mana pakaian yang terkena produk.
- **Jika tersedut:**  
 Jika mangsa tidak sedarkan diri, letakkan pesakit dengan stabil dalam kedudukan mengiring untuk diangkat.
- **Jika terkena kulit:** Segera basuh dengan air dan sabun serta bilas bersih-bersih.
- **Jika terkena mata:**  
 Bilas mata sambil membukanya di bawah air yang mengalir selama beberapa minit. Kemudian hubungi doktor.
- **Jika tertelan:** Minum air yang banyak dan berikan udara bersih. Segera hubungi doktor.
- **Maklumat untuk doktor:**
- **Gejala dan kesan paling penting, akut dan lewat** Tiadak maklumat lanjut yang diperolehi.
- **Arahan bagi apa-apa rawatan perubatan dan rawatan khas yang diperlukan**  
 Tiadak maklumat lanjut yang diperolehi.

### 5 Langkah-langkah pemadaman kebakaran

- **Bahan pemadam api**
- **Agan pemadam yang sesuai:** Gunakan kaedah pemadaman kebakaran yang sesuai dengan keadaan sekeliling.
- **Bahaya khusus yang timbul daripada bahan atau campuran** Tiadak maklumat lanjut yang diperolehi.
- **Panduan kepada pemadam kebakaran**
- **Kelengkapan perlindungan:** Peralatan perlindungan pernafasan mulut.

MY

(Bersambung ke halaman 3)



## Helaiian Data Keselamatan menurut P.U.(A) 310/2013

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**Nama dagang: SCHIFF'S REAGENT**

(Sambungan halaman 2)

### 6 Langkah-langkah pelepasan tidak sengaja

- **Langkah perlindungan diri, kelengkapan pelindung dan prosedur kecemasan**  
Pasang alat perlindungan pernafasan.  
Pakai kelengkapan perlindungan. Jauhkan mereka yang tidak dilindung dari kawasan tercemar.
- **Langkah perlindungan alam sekitar: Jangan biarkannya memasuki pembentung/air permukaan atau tanah.**
- **Kaedah dan bahan untuk pembendungan dan pembersihan:**  
Serap dengan bahan cecair pengikat (pasir, diatomit, pengikat asid, pengikat semesta, habuk papan)  
Gunakan agen penutralan.  
Lupuskan bahan tercemar sebagai sisa mengikut perkara 13.  
Pastikan pengalihudaraan mencukupi.
- **Rujukan ke bahagian lain**  
Lihat Bahagian 7 untuk maklumat pengendalian yang selamat.  
Lihat Bahagian 8 untuk maklumat kelengkapan perlindungan diri.  
Lihat Bahagian 13 untuk maklumat pelupusan.

### 7 Pengendalian dan penyimpanan

- **Pengendalian:**
- **Langkah perlindungan untuk pengendalian selamat**  
Pastikan pengalihudaraan/ekzos yang mencukupi di tempat kerja.  
Buka dan kendalikan bekas dengan cermat.  
Elakkan pembentukan aerosol.
- **Maklumat kebakaran dan perlindungan daripada letupan:** Pastikan alat perlindungan pernafasan sentiasa ada.
- **Keadaan untuk penyimpanan selamat, termasuk apa-apa ketakserasian**
- **Penyimpanan:**
- **Keperluan yang mesti dipenuhi oleh bilik stor dan ruang simpanan.** Tiada keperluan khusus.
- **Maklumat penyimpanan di dalam satu tempat penyimpanan yang biasa:** Jangan simpan bersama dengan asid.
- **Maklumat lanjut tentang syarat penyimpanan:** Pastikan bekas sentiasa bertutup rapat.
- **Kegunaan akhir yang khusus** Tiada maklumat lanjut yang diperolehi.

### 8 Kawalan pendedahan dan perlindungan diri

- **Maklumat tambahan tentang reka bentuk kemudahan teknikal:** Tiada maklumat lanjut, lihat perkara 7.
- **Parameter kawalan**

- **Ramuan dengan nilai had yang memerlukan pemantauan di tempat kerja:**

<b>7647-01-0 asid hidroklorik, larutan akueus</b>
PEL had siling: 7.5 mg/m <sup>3</sup> , 5 ppm
<b>7681-57-4 natrium metabisulfit</b>
PEL Nilai jangka panjang: 5 mg/m <sup>3</sup>

- **Maklumat tambahan:** Senarai yang sah semasa pembuatan digunakan sebagai asas.

- **Kawalan pendedahan**
- **Kelengkapan perlindungan diri:**
- **Langkah perlindungan dan kebersihan am:**  
Jauhkan daripada makanan, minuman dan makanan haiwan.  
Segera tanggalkan semua pakaian yang tercemar dan kotor.  
Basuh tangan sebelum berhenti rehat dan apabila kerja selesai.  
Simpan pakaian perlindungan secara berasingan.  
Elakkan daripada terkena mata.

(Bersambung ke halaman 4)

## Helaiian Data Keselamatan menurut P.U.(A) 310/2013

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**Nama dagang: SCHIFF'S REAGENT**

(Sambungan halaman 3)

Elakkan daripada terkena mata dan kulit.

• **Perlindungan pernafasan:**

Jika berlaku pendedahan sekejap atau sedikit pencemaran, gunakan alat penapis pernafasan. Jika berlaku pendedahan yang intensif atau berpanjangan, gunakan alat pernafasan perlindungan serba lengkap.

• **Perlindungan tangan:**



Sarung tangan pelindung.

Bahan sarung tangan hendaklah telus dan kalis terhadap produk/bahan/sediaan.

Oleh sebab tiada ujian yang dijalankan, maka tiada syor bagi bahan sarung tangan yang boleh diberikan untuk produk/sediaan/campuran kimia.

Pemilihan bahan sarung tangan berdasarkan waktu penembusan, kadar pembauran dan degradasi.

• **Bahan sarung tangan**

Pemilihan sarung tangan yang sesuai bukan hanya bergantung pada bahannya, tetapi juga tanda kualiti lainnya serta perbezaannya daripada satu pengeluar dengan pengeluar yang lain. Memandangkan produk merupakan suatu sediaan daripada beberapa bahan, ketahanan bahan sarung tangan tidak boleh dipastikan terlebih dahulu, oleh itu sarung tangan hendaklah diperiksa sebelum digunakan.

• **Jangka masa penyerapan bahan sarung tangan**

Waktu kemunculan yang tepat hendaklah diperoleh pengeluar sarung tangan pelindung dan hendaklah dipatuhi.

• **Perlindungan mata:**



Gogal bertutup rapat

### 9 Sifat fizikal dan kimia

• **Maklumat tentang ciri fizik dan kimia**

• **Maklumat Am**

• **Rupa:**

• **Bentuk:** Cecair

• **Warna:** Jernih

• **Bau:** Kuat

• **Ambang bau** Tidak ditentukan.

• **Nilai pH pada 20 °C:** 2

• **Perubahan pada keadaan**

• **Takat lebur/takat beku** Tidak ditentukan.

• **Takat didih awal dan julat didih** Tidak ditentukan

• **Takat kilat:** Tidak berkenaan

• **Kemudahbakaran (pepejal, gas)** Tidak berkenaan

• **Suhu penguraian:** Tidak ditentukan.

• **Suhu pengautocucuhan** Produk tidak tercucuh sendiri

• **Bahaya letupan:** Produk tidak ada bahaya letupan.

• **Had letupan :**

• **Bawah:** Tidak ditentukan.

• **Atas:** Tidak ditentukan.

(Bersambung ke halaman 5)

## Helaiian Data Keselamatan menurut P.U.(A) 310/2013

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**Nama dagang: SCHIFF'S REAGENT**

(Sambungan halaman 4)

· <b>Tekanan wap pada 20 °C:</b>	23 hPa
· <b>Ketumpatan:</b>	Tidak ditentukan.
· <b>Ketumpatan bandingan</b>	Tidak ditentukan.
· <b>Ketumpatan wap</b>	Tidak ditentukan.
· <b>Kadar penyejatan</b>	Tidak ditentukan.
· <b>Keterlarutan dalam / Keterlarutcampuran dengan</b>	
· <b>Air:</b>	Tidak terlarut campur atau sukar bercampur.
· <b>Pekali sekatan: n-oktanol/air</b>	Tidak ditentukan.
· <b>Kelikatan:</b>	
· <b>Dinamik:</b>	Tidak ditentukan.
· <b>Kinematik:</b>	Tidak ditentukan.
· <b>Kandungan pelarut:</b>	
· <b>Air:</b>	89.0 %
· <b>Kandungan pepejal:</b>	0.0 %
· <b>Maklumat lain</b>	Tiada maklumat lanjut yang diperoleh.

### 10 Kestabilan dan kereaktifan

- **Kereaktifan** Tiada maklumat lanjut yang diperoleh.
- **Kestabilan kimia**
- **Penguraian terma/keadaan yang perlu dielakkan:** Tiada penguraian jika digunakan mengikut spesifikasi.
- **Kemungkinan tindak balas berbahaya** Terkena asid membebaskan gas toksik.
- **Keadaan yang perlu dielakkan** Tiada maklumat lanjut yang diperoleh.
- **Bahan tidak serasi:** Tiada maklumat lanjut yang diperoleh.
- **Produk penguraian yang berbahaya:** Tiada produk penguraian berbahaya yang diketahui.

### 11 Maklumat toksikologi

- **Maklumat tentang kesan toksikologi**
- **Ketoksikan akut:**
- **Kesan kerengsaan primer:**
- **Kakisan atau kerengsaan kulit** Kesan kaustik yang kuat pada kulit dan mukus membran.
- **Kerosakan atau kerengsaan mata yang serius**  
Kesan kaustik yang kuat.  
Perengsa yang kuat dengan bahaya kecederaan mata yang teruk.
- **Pemekaan pernafasan / kulit** Tiada kesan pemekaan yang diketahui.
- **Maklumat tambahan toksikologi:**  
Produk menunjukkan bahaya berikut mengikut kaedah pengiraan Garis Panduan Pengelasan Am EU bagi Sediaan seperti yang dikeluarkan dalam versi terbaru:  
Mengakis  
Perengsa  
Tertelan akan menyebabkan kesan kaustik yang kuat pada mulut dan tekak serta bahaya perliangan esofagus dan perut.  
Karsinogen.

(Bersambung ke halaman 6)

MY

## Helaian Data Keselamatan menurut P.U.(A) 310/2013

Tarikh cetak 07.10.2021

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**Nama dagang: SCHIFF'S REAGENT**

(Sambungan halaman 5)

- **Maklumat bagi kumpulan berikut tentang kesan yang mungkin timbul.**
- **Kesan CMR (karsinogen, mutagen dan gangguan kesuburan)**  
Kars. 1B


### 12 Maklumat ekologi

- **Ketoksikan**
- **Ketoksikan akuatik:** Tiada maklumat lanjut yang diperolehi.
- **Keterusan dan keterdegradasikan** Tiada maklumat lanjut yang diperolehi.
- **Kelakuan dalam sistem alam sekitar:**
- **Potensi bioakumulatif** Tiada maklumat lanjut yang diperolehi.
- **Mobiliiti di dalam tanah** Tiada maklumat lanjut yang diperolehi.
- **Maklumat tambahan ekologi:**
- **Nota am:**  
Bahaya air kelas 3 (Peraturan Jerman) (Penilaian sendiri): amat berbahaya kepada air  
Jangan biarkan produk memasuki air tanah, saluran air atau sistem pembentungan, walaupun sedikit.  
Tidak boleh memasuki air pembentungan atau parit saluran tanpa dicairkan atau dineutralkan.  
Bahaya kepada air minuman walaupun dalam amat sedikit produk kebocoran yang memasuki tanah
- **Keputusan penilaian PBT dan vPvB**
- **PBT:** Tidak berkenaan
- **vPvB:** Tidak berkenaan
- **Kesan buruk yang lain** Tiada maklumat lanjut yang diperolehi.

### 13 Maklumat pelupusan

- **Kaedah rawatan sisa**
- **Syor:**  
Tidak boleh dilupuskan bersama dengan sampah isi rumah. Jangan biarkan produk memasuki sistem pembentungan.
- **Pembungkusan yang tidak bersih:**
- **Syor:** Pelupusan mestilah dijalankan menurut peraturan rasmi

### 14 Maklumat pengangkutan

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>· <b>Nombor UN</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>  | <p>UN1789</p>   |
| <ul style="list-style-type: none"> <li>· <b>Nama penghantaran UN yang betul</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG, IATA</b></li> </ul>   | <p>1789 HYDROCHLORIC ACID mixture<br/>HYDROCHLORIC ACID mixture</p> |
| <ul style="list-style-type: none"> <li>· <b>pengangkutan kelas bahaya</b></li> <li>· <b>ADR, IMDG, IATA</b></li> </ul>  | <p>8</p>  |
| <div style="text-align: center;">  </div> <ul style="list-style-type: none"> <li>· <b>Kelas</b></li> <li>· <b>Label</b></li> </ul> | <p>8 Bahan mengakis.<br/>8</p>                                      |

(Bersambung ke halaman 7)

## Helaian Data Keselamatan menurut P.U.(A) 310/2013

Tarikh cetak 07.10.2021

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Nama dagang: SCHIFF'S REAGENT

(Sambungan halaman 6)

· <b>Kumpulan pembungkusan</b> · <b>ADR, IMDG, IATA</b>	II
· <b>Hazard persekitaran:</b>	Tidak berkenaan
· <b>Langkah perlindungan khas untuk pengguna</b> · <b>Kod bahaya (Kemler):</b> · <b>Nombor EMS:</b> · <b>Segregation groups</b> · <b>Stowage Category</b>	Amaran: Bahan mengakis. 80 F-A,S-B Strong acids C
· <b>Pengangkutan dalam pukal menurut Lampiran II MARPOL73/78 dan Kod IBC</b>	Tidak berkenaan
· <b>Pengangkutan/Maklumat Tambahan:</b>	
· <b>ADR</b> · <b>Excepted quantities (EQ)</b>	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>IMDG</b> · <b>Limited quantities (LQ)</b> · <b>Excepted quantities (EQ)</b>	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· <b>"Peraturan Model" UN:</b>	UN 1789 HYDROCHLORIC ACID MIXTURE, 8, II

### 15 Maklumat pengawalseliaan

- Peraturan/undang-undang keselamatan, kesihatan dan persekitaran khusus untuk bahan atau campuran tersebut

· <b>Senarai Rujukan Bahan Berbahaya Alam Sekitar</b>	
7647-01-0	asid hidroklorik, larutan akueus
7681-57-4	natrium metabisulfit
569-61-9	4,4'-(4-iminocyclohexa-2,5-dienylidenemethylene)dianiline hydrochloride

- **Unsur label GHS** Produk ini dikelaskan dan dilabelkan menurut Sistem Terharmoni Global (GHS).
- **Piktogram hazard**



GHS05 GHS08

- **Perkataan isyarat Bahaya**
- **Komponen pelabelan yang menentukan bahaya:**  
asid hidroklorik, larutan akueus  
4,4'-(4-iminocyclohexa-2,5-dienylidenemethylene)dianiline hydrochloride  
natrium metabisulfit
- **Pernyataan hazard**  
Menyebabkan lecuran kulit dan kerosakan mata yang teruk.  
Boleh menyebabkan kanser.

(Bersambung ke halaman 8)

## Helaiian Data Keselamatan menurut P.U.(A) 310/2013

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**Nama dagang: SCHIFF'S REAGENT**

(Sambungan halaman 7)

· **Pernyataan langkah perlindungan**

**JIKA TERKENA KULIT (atau rambut):** Segera tanggalkan/buka semua pakaian yang tercemar. Basuh kulit dengan air/pancuran air.

**JIKA TERKENA MATA:** Bilas berhati-hati dengan air selama beberapa minit. Tanggalkan kanta lekap, jika ada dan dapat dilakukan dengan mudah. Teruskan membilas.

Segera hubungi PUSAT RACUN/doktor.

Rawatan khas (lihat label ini).

Simpan di tempat berkunci.

Lupuskan kandungan/bekas menurut peraturan tempatan/wilayah/kebangsaan/antarabangsa.

· **Peraturan kebangsaan:**

· **Maklumat had kegunaan:**

Pekerja tidak dibenarkan terdedah kepada bahan karsinogen berbahaya yang terkandung dalam sediaan ini. Pengecualian boleh dibuat oleh pihak berkuasa dalam kes tertentu.

· **Penilaian keselamatan bahan kimia:** Penilaian Keselamatan Bahan Kimia belum dilakukan.

### 16 Maklumat lain

Maklumat ini berdasarkan maklumat kami yang terkini. Walau bagaimanapun, ini tidak akan menjadi jaminan bagi apa-apa ciri produk yang khusus dan tidak akan mewujudkan hubungan kontraktual yang sah dari segi undang-undang.

· **Singkatan dan akronim:**

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

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Toks. Akut 4: Ketoksikan akut – Kategori 4

Skin Corr. 1: Kakisan atau kerengsaan kulit – Kategori 1

Kros. Mata 1: Kerosakan mata atau kerengsaan mata yang serius – Kategori 1

Kars. 1B: Kekarsinogenan – Kategori 1B

STOT SE 3: Ketoksikan organ sasaran khusus (pendedahan tunggal) – Kategori 3

# 安全資料表

## 根據 危害性化學品標示及通識規則

打印日期 2021.10.07

在 2021.10.07 審核

### 1 化學品與廠商資料

- 產品識別者
- 化學品中文(英文)名稱, 化學品俗名或商品名: SCHIFF'S REAGENT
- 商品編號: 26052-05, 26774-01, 26853-01, 26052-06, 26920-04
- 相應純物質或者混合物的相關下位用途及禁止用途 無相關詳細資料。
- 原材料的應用/準備工作進行 實驗室化學物
- 安全技術說明書內供應商詳細信息
- 企業名稱:  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- 可獲取更多資料的部門: Product safety department
- 緊急聯繫電話號碼:  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### 2 危害辨識資料

- 緊急情況概述:  
純淨的, 液體, 造成嚴重皮膚灼傷和眼睛損傷。可能致癌。

- GHS危險性類別



健康危險

致癌物質 第1B級 H350 可能致癌



腐蝕

腐蝕/刺激皮膚物質 第1B級 H314 造成嚴重皮膚灼傷和眼睛損傷  
嚴重損傷/刺激眼睛物質 第1級 H318 造成嚴重眼睛損傷

- 標籤因素
- GHS標籤元素 本產品根據化學物質分類及標記全球協調制度(GHS)進行了分類及標記。
- 圖示



GHS05 GHS08

- 名稱 危險
- 標籤上辨別危險的成份:  
氫氯酸  
鹼性紅 9  
偏二亞硫酸鈉
- 危險字句  
造成嚴重皮膚灼傷和眼睛損傷  
可能致癌

(在 2 頁繼續)

# 安全資料表

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(在 1 頁繼續)

### · 警戒字句

### · 事故響應

如皮膚(或頭髮)沾染: 立即移除或脫掉所有沾染的衣物。用水沖洗/淋洗皮膚。  
如進入眼睛: 用水小心清洗數分鐘。如帶隱形眼鏡且可方便地取出, 取出隱形眼鏡。繼續清洗。  
立即呼叫解毒中心/醫生  
專項處置(參見本標示)。

### · 安全貯存

加鎖存放。

### · 廢棄處置

按照地方/區域/國家/國際法規處理內容物之廢棄/容器。

### · 其他有害性

· PBT(殘留性、生物濃縮性、毒性物質) 及 vPvB(高殘留性、高生物濃縮性物質) 評價結果

· PBT(殘留性、生物濃縮性、毒性物質) 不適用的

· vPvB(高殘留性、高生物濃縮性物質): 不適用的

## 3 成分辨識資料

### · 混合物

· 描述: 由以下含有無害添加劑的成分組成的混合物

### · 危險的成分:

7647-01-0	氫氟酸 ⚠ 腐蝕/刺激皮膚物質 第1B級, H314; 嚴重損傷/刺激眼睛物質 第1級, H318; ⚠ 急毒性物質(吞食) 第4級, H302; 特定標的器官系統毒性物質(單一暴露) 第3級, H335	>2.5-≤10%
7681-57-4	偏二亞硫酸鈉 ⚠ 嚴重損傷/刺激眼睛物質 第1級, H318; ⚠ 急毒性物質(吞食) 第4級, H302	>2.5-≤10%
569-61-9	鹼性紅 9 ⚠ 致癌物質 第1B級, H350	≤2.5%

## 4 急救措施

### · 應急措施要領

· 總說明: 馬上脫下染有該產品的衣服。

· 吸入: 萬一病人不清醒時, 請讓病人側躺以便移動。

· 皮膚接觸: 馬上用水和肥皂進行徹底的沖洗。

· 眼睛接觸: 張開眼睛在流水下沖洗數分鐘, 然後諮詢醫生。

· 食入: 喝大量的清水和提供新鮮的空氣, 馬上召喚醫生。

### · 給醫生的資料:

· 最重要的急慢性症狀及其影響 無相關詳細資料。

· 需要及時的醫療處理及特別處理的症狀 無相關詳細資料。

## 5 滅火措施

### · 滅火方法

· 滅火的方法和滅火劑: 使用適合四周環境的滅火措施。

· 特別危險性 無相關詳細資料。

### · 特殊滅火方法

· 消防人員特殊的防護裝備: 口腔呼吸保護裝置。

TW

(在 3 頁繼續)



# 安全資料表

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### 6 洩漏處理方法

#### · 保護措施

裝上呼吸保護裝置.

帶上保護儀器. 讓未受到保護的人們遠離.

· **環境保護措施:** 切勿讓其進入下水道/水面或地下水.

#### · 密封及淨化方法和材料:

吸收液體粘合原料 (沙粒、矽藻土、酸性粘合劑、通用粘合劑、鋸屑).

使用中和劑.

根據第 13 條條款棄置受汙染物.

確保有足夠的通風裝置.

#### · 參照其他部分

有關安全處理的資料請參閱第 7 節.

有關個人保護裝備的資料請參閱第 8 節.

有關棄置的資料請參閱第 13 節.

### 7 安全處置與儲存方法

#### · 操作處置

#### · 儲存

確保工作間有良好的通風/排氣裝置.

小心打開及處理貯藏器.

防止氣溶膠的形成.

· **有關火災及防止爆炸的資料:** 提供呼吸保護裝置.

#### · 混合危險性等安全儲存條件

#### · 儲存:

· **儲存庫和容器須要達到的要求:** 沒有特別的要求.

· **有關使用一個普通的儲存設施來儲存的資料:** 切勿與酸性物質儲存在一起.

· **有關儲存條件的更多資料:** 將容器密封.

· **具體的最終用戶** 無相關詳細資料.

### 8 暴露預防措施

· **工程控制方法:** 沒有進一步數據;見第 7 項.

#### · 控制變數

#### · 在工作場需要監控的限值成分

7647-01-0 氫氯酸

PEL (TW) | PC-TWA: 7.5 mg/m<sup>3</sup>, 5 ppm

OEL (CN) | 上限值: 7.5 mg/m<sup>3</sup>

· **額外的資料:** 制作期間有效的清單將作為基礎來使用.

#### · 遺漏控制

#### · 個人防護設備:

#### · 一般保護和衛生措施:

遠離食品、飲料和飼料.

立即除去所有的不潔的和被汙染的衣服.

在休息之前和工作完畢後請清洗雙手.

分開儲存保護性衣服.

避免和眼睛接觸.

避免和眼睛及皮膚接觸.

(在 4 頁繼續)

# 安全資料表

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### · 呼吸系統防護:

如果會短暫接觸或在低污染的情況下,請使用呼吸過濾裝置. 如果會深入或較長時間接觸,請使用獨立的呼吸保護裝置.

### · 手防護:



保護手套

手套的物料必須是不滲透性的,且能抵抗該產品/物質/添加劑.

基於缺乏測試,對於產品/制劑/化學混合物,並不會提供手套材料的建議

選擇手套材料時,請注意材料的滲透時間,滲濾率和降解參數

### · 手套材料

選擇合適的手套不單取決於材料,亦取決於質量特征,以及來自哪一間生產廠家,因為該產品是由很多材料配製而成,手套材料的抵抗力並不可預計,所以,必須在使用之前進行檢查

· **滲入手套材料的時間** 請向勞保手套生產廠家獲取準確的破裂時間並觀察實際的破裂時間

### · 眼睛防護:



密封的護目鏡

## 9 物理及化學性質

### · 有關基本物理及化學特性的資訊

#### · 一般說明

#### · 外觀:

- 形狀: 液體
- 顏色: 純淨的
- 氣味: 堅固的
- 嗅覺閾限: 未決定.

· pH值 在 20 °C: 2

#### · 條件的更改

- 熔點: 未確定的
- 沸點/初沸點和沸程: 未確定的

· 閃點: 不適用的

· 可燃性 (固體、氣體): 不適用的

· 分解溫度: 未決定.

· 自燃溫度: 該產品是不自燃的

· 爆炸的危險性: 該產品並沒有爆炸的危險

#### · 爆炸極限:

- 較低: 未決定.
- 較高: 未決定.

· 蒸氣壓 在 20 °C: 23 hPa

- 密度: 未決定的
- 相對密度: 未決定.
- 蒸氣密度: 未決定.

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# 安全資料表

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(在 4 頁繼續)

· 蒸發速率	未決定.
· 溶解性	
· 水:	不能拌和的或難以拌和
· n-辛醇/水分配係數:	未決定.
· 黏性:	
· 動態:	未決定.
· 運動學的:	未決定.
· 溶劑成份:	
· 水:	89.0 %
· 固體成份:	0.0 %
· 其他資訊	無相關詳細資料。

### 10 安定性及反應性

- 反應性 無相關詳細資料。
- 穩定性
- 熱分解/要避免的情況: 如果遵照規格使用則不會分解。
- 有害反應可能性 和酸接觸時釋放有毒氣體。
- 應避免的條件 無相關詳細資料。
- 不相容的物質: 無相關詳細資料。
- 危險的分解產物: 未知有危險的分解產品。

### 11 毒性資料

- 對毒性學影響的資訊
- 急性毒性:
- 主要的刺激性影響:
- 皮膚: 在皮膚和粘膜上造成強烈的腐蝕性影響。
- 在眼睛上面:
  - 強烈的腐蝕性影響。
  - 強烈的刺激性和造成嚴重傷害眼睛的危險。
- 致敏作用: 沒有已知的敏化影響。
- 更多毒物的資料:
  - 根據有關配制的 一般歐盟分類指南的計算方法 (刊印在最新版本), 該產品顯示以下的危險:
  - 腐蝕性的
  - 刺激性的
  - 吞咽該產品除了導致口部和喉嚨出現強烈的腐蝕性現象之外, 還有對食道和胃部造成穿孔的危險。
  - 致癌的。
- 對以下組別可能產生影響的資料:
- CMR作用 (致癌、導致基因突變、對生殖系統有害)
  - 致癌物質 第1B級

### 12 生態資料

- 生態毒性
- 水生毒性: 無相關詳細資料。
- 持久性和降解性 無相關詳細資料。

(在 6 頁繼續)

# 安全資料表

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(在 5 頁繼續)

- 環境系統習性:
- 潛在的生物累積性 無相關詳細資料。
- 土壤內移動性 無相關詳細資料。
- 額外的生態學資料:
- 總括注解:  
水危害級別 3 (德國規例) (通過名單進行自我評估): 對水是極其危害的  
即使是少量, 不要讓該產品接觸地下水、水道或汗水系統。  
不要讓未被稀釋或未被中和的產品接觸下水道或排水溝渠。  
即使是極其少量的產品滲入地下也會對飲用水造成危險。
- PBT(殘留性、生物濃縮性、毒性物質) 及 vPvB(高殘留性、高生物濃縮性物質) 評價結果
- PBT(殘留性、生物濃縮性、毒性物質) 不適用的
- vPvB(高殘留性、高生物濃縮性物質): 不適用的
- 其他副作用 無相關詳細資料。

### 13 廢棄處置方法

- 廢棄處置方法
- 建議: 不能將該產品和家居垃圾一起丟棄. 不要讓該產品接觸汗水系統。
- 受污染的容器和包裝:
- 建議: 必須根據官方的規章來丟棄。

### 14 運送資料

· 聯合國危險貨物編號(UN號)	
· ADR, IMDG, IATA	UN1789
· UN適當裝船名	
· ADR	1789 HYDROCHLORIC ACID mixture
· IMDG, IATA	HYDROCHLORIC ACID mixture
· 運輸危險等級	
· ADR, IMDG, IATA	
	
· 級別	8 腐蝕性物質
· 標籤	8
· 包裝組別	
· ADR, IMDG, IATA	II
· 危害環境:	不適用的
· 用戶特別預防措施	警告: 腐蝕性物質
· 危險編碼:	80
· EMS 號碼:	F-A,S-B
· Segregation groups	Strong acids
· Stowage Category	C

(在 7 頁繼續)

# 安全資料表

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(在 6 頁繼續)

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>· MARPOL73/78(針對船舶引起的海洋污染預防協約) 附件書2及根據IBC Code(國際裝船貨物編碼)的大量運送</li> </ul>                 | 不適用   |
| <b>· 運輸/額外的資料:</b>  |   |
| <ul style="list-style-type: none"> <li>· ADR</li> <li>· Excepted quantities (EQ)</li> </ul>                                     | Code: E2<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 500 ml       |
| <ul style="list-style-type: none"> <li>· IMDG</li> <li>· Limited quantities (LQ)</li> <li>· Excepted quantities (EQ)</li> </ul> | 1L<br>Code: E2<br>Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 500 ml |
| <b>· UN "標準規定":</b>   | UN 1789 HYDROCHLORIC ACID MIXTURE, 8, II  |

### 15 法規資料

- 對相應純物質或者混合物的安全、保健及環境法規/法律
- 優先管理化學品之指定及運作管理辦法

- 附表一-對於未滿十八歲及妊娠或分娩後未滿一年女性勞工具危害性之化學品

沒有列出成份

- 第二條第二款第一目

沒有列出成份

- 第二條第二款第二目

7647-01-0 氫氟酸

7681-57-4 偏二亞硫酸鈉

- 新化學物質及既有化學物質資料登錄辦法 英

沒有列出成份

- 中國現有化學物質名錄

列出所有成分

- TCSCA

- 列管編號

沒有列出成份

- 毒性分類

沒有列出成份

- 管制濃度 ( w/w% )

沒有列出成份

- 大量運作基準 ( 公斤 )

沒有列出成份

- 新化學物質及既有化學物質資料登錄辦法, 附表六

沒有列出成份

- TCSI - Taiwan Chemical Substance Inventory

列出所有成分

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# 安全資料表

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· **GHS標籤元素** 本產品根據化學物質分類及標記全球協調制度(GHS)進行了分類及標記。· **圖示**

GHS05 GHS08

· **名稱** 危險· **標籤上辨別危險的成份:**

氫氯酸

鹼性紅 9

偏二亞硫酸鈉

· **危險字句**

造成嚴重皮膚灼傷和眼睛損傷

可能致癌

· **警戒字句**· **事故響應**

如皮膚(或頭髮)沾染: 立即移除或脫掉所有沾染的衣物。用水沖洗/淋洗皮膚。

如進入眼睛: 用水小心清洗數分鐘。如帶隱形眼鏡且可方便地取出, 取出隱形眼鏡。繼續清洗。

立即呼叫解毒中心/醫生

專項處置(參見本標示)。

· **安全貯存**

加鎖存放。

· **廢棄處置**

按照地方/區域/國家/國際法規處理內容物之廢棄/容器。

· **國家的規章:**· **有關使用限制的資料:** 禁止員工接觸在配制中含有致癌的物料。在某些情況中由當局作出例外的決定。· **化學物質安全性評價:** 尚未進行化學物質安全性評價

## 16 其他資料

該資料是基於我們目前的知識。然而,這並不構成對任何特定產品特性的擔保並且不建立一個法律上有效的合同關係。

· **縮寫:**

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

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: 持久性生物累積性有毒物質

vPvB: very Persistent and very Bioaccumulative

急毒性物質(吞食) 第4級: Acute toxicity – Category 4

腐蝕/刺激皮膚物質 第1B級: Skin corrosion/irritation – Category 1B

嚴重損傷/刺激眼睛物質 第1級: Serious eye damage/eye irritation – Category 1

致癌物質 第1B級: Carcinogenicity – Category 1B

特定標的器官系統毒性物質(單一暴露) 第3級: Specific target organ toxicity (single exposure) – Category 3

TW

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### SECÇÃO 1: Identificação da substância/mistura e da sociedade/empresa

- **1.1 Identificador do produto**
- **Nome comercial:** SCHIFF'S REAGENT
- **Código do produto:** 26052-05, 26774-01, 26853-01, 26052-06, 26920-04
- **UFI:** XAY0-U0E6-5008-AJA5
- **1.2 Utilizações identificadas relevantes da substância ou mistura e utilizações desaconselhadas**  
Não existe mais nenhuma informação relevante disponível.
- **Utilização da substância / da preparação** Químicos de laboratório
- **1.3 Identificação do fornecedor da ficha de dados de segurança**
- **Fabricante/fornecedor:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Entidade para obtenção de informações adicionais:** Product safety department
- **1.4 Número de telefone de emergência:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### SECÇÃO 2: Identificação dos perigos

- **2.1 Classificação da substância ou mistura**
- **Classificação em conformidade com o Regulamento (CE) n.º 1272/2008**



GHS08 perigo para a saúde

Carc. 1B      H350 Pode provocar cancro.



GHS05 corrosão

Skin Corr. 1B H314 Provoca queimaduras na pele e lesões oculares graves.

Eye Dam. 1 H318 Provoca lesões oculares graves.

- **2.2 Elementos do rótulo**
- **Rotulagem em conformidade com o Regulamento (CE) n.º 1272/2008**  
O produto classificou-se e está etiquetado em conformidade com o regulamento CLP.
- **Pictogramas de perigo**



GHS05



GHS08

- **Palavra-sinal Perigo**
- **Componentes determinantes para os perigos constantes do rótulo:**  
cloreto de hidrogenio  
4,4'-(4-iminociclohexa-2,5-dienilidenometileno)dianilina, cloridrato  
dissulfito de dissódio

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### · Advertências de perigo

H314 Provoca queimaduras na pele e lesões oculares graves.

H350 Pode provocar cancro.

### · Recomendações de prudência

P303+P361+P353 SE ENTRAR EM CONTACTO COM A PELE (ou o cabelo): Retirar imediatamente toda a roupa contaminada. Enxaguar a pele com água [ou tomar um duche].

P305+P351+P338 SE ENTRAR EM CONTACTO COM OS OLHOS: Enxaguar cuidadosamente com água durante vários minutos. Se usar lentes de contacto, retire-as, se tal lhe for possível. Continue a enxaguar.

P310 Contacte imediatamente um CENTRO DE INFORMAÇÃO ANTIVENENOS/médico.

P321 Tratamento específico (ver no presente rótulo).

P405 Armazenar em local fechado à chave.

P501 Eliminar o conteúdo/recipiente de acordo com a legislação local/regional/nacional/internacional.

### · Indicações adicionais:

EUH031 Em contacto com ácidos liberta gases tóxicos.

### · 2.3 Outros perigos

#### · Resultados da avaliação PBT e mPmB

· PBT: Não aplicável.

· mPmB: Não aplicável.

## SECÇÃO 3: Composição/informação sobre os componentes

### · 3.2 Caracterização química: Misturas

· Descrição: Mistura das seguintes substâncias com aditivos não perigosos.

#### · Substâncias perigosas:

CAS: 7647-01-0 EINECS: 231-595-7	cloreto de hidrogenio ☠ Skin Corr. 1B, H314; Eye Dam. 1, H318; ☠ Acute Tox. 4, H302; STOT SE 3, H335	>2,5-≤10%
CAS: 7681-57-4 EINECS: 231-673-0	dissulfito de dissódio ☠ Eye Dam. 1, H318; ☠ Acute Tox. 4, H302	>2,5-≤10%
CAS: 569-61-9 EINECS: 209-321-2	4,4'-(4-iminociclohexa-2,5-dienilidenometileno)dianilina, cloridrato ☠ Carc. 1B, H350	≤2,5%

· Avisos adicionais: O texto das indicações de perigo aqui incluído poderá ser consultado no capítulo 16.

## SECÇÃO 4: Medidas de primeiros socorros

### · 4.1 Descrição das medidas de primeiros socorros

· Indicações gerais: O vestuário contaminado com substâncias perigosas deve ser imediatamente removido.

#### · Em caso de inalação:

Se a vítima estiver inconsciente, posicioná-la e transportá-la com estabilidade, deitada lateralmente.

· Em caso de contacto com a pele: Lavar imediatamente com água e sabão e enxaguar abundantemente.

#### · Em caso de contacto com os olhos:

Enxaguar os olhos durante alguns minutos sob água corrente, mantendo as pálpebras abertas, e consultar o médico.

· Em caso de ingestão: Beber bastante água e respirar ar fresco. Consultar imediatamente um médico.

### · 4.2 Sintomas e efeitos mais importantes, tanto agudos como retardados

Não existe mais nenhuma informação relevante disponível.

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- **4.3 Indicações sobre cuidados médicos urgentes e tratamentos especiais necessários**  
Não existe mais nenhuma informação relevante disponível.

### SECÇÃO 5: Medidas de combate a incêndios

- **5.1 Meios de extinção**
- **Meios adequados de extinção:** Coordenar no local medidas para extinção do fogo.
- **5.2 Perigos especiais decorrentes da substância ou mistura**  
Não existe mais nenhuma informação relevante disponível.
- **5.3 Recomendações para o pessoal de combate a incêndios**
- **Equipamento especial de protecção:** Colocar máscara de respiração.

### SECÇÃO 6: Medidas a tomar em caso de fugas acidentais

- **6.1 Precauções individuais, equipamento de protecção e procedimentos de emergência**  
Colocar máscara de respiração.  
Usar equipamento de protecção. Manter as pessoas desprotegidas afastadas.
- **6.2 Precauções a nível ambiental:** Evitar que penetre na canalização / águas superficiais / águas subterrâneas.
- **6.3 Métodos e materiais de confinamento e limpeza:**  
Recolher com produtos que absorvam líquidos (areia, seixos, absorventes universais, serradura ).  
Aplicar um agente de neutralização.  
Eliminar residualmente as substâncias contaminadas como um resíduo segundo o Ponto 13.  
Assegurar uma ventilação adequada.
- **6.4 Remissão para outras secções**  
Para informações sobre uma manipulação segura, ver o capítulo 7.  
Para informações referentes ao equipamento de protecção individual, ver o capítulo 8.  
Para informações referentes à eliminação residual, ver o capítulo 13.

### SECÇÃO 7: Manuseamento e armazenagem

- **7.1 Precauções para um manuseamento seguro**  
Assegurar uma boa ventilação / exaustão no local de trabalho.  
Abrir e manusear o recipiente com cuidado  
Evitar a formação de aerossóis.
- **Precauções para prevenir incêndios e explosões:** Manter uma máscara de respiração sempre preparada.
- **7.2 Condições de armazenagem segura, incluindo eventuais incompatibilidades**
- **Armazenagem:**
- **Requisitos para espaços ou contentores para armazenagem:** Sem requisitos especiais.
- **Avisos para armazenagem conjunta:** Não armazenar juntamente com ácidos.
- **Outros avisos sobre as condições de armazenagem:** Manter o recipiente hermeticamente fechado.
- **7.3 Utilização(ões) final(is) específica(s)** Não existe mais nenhuma informação relevante disponível.

### SECÇÃO 8: Controlo da exposição/Protecção individual

- **Indicações adicionais para concepção de instalações técnicas:** Não existem outras informações, ver ponto 7.

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### · 8.1 Parâmetros de controlo

#### · Componentes cujo valor do limite de exposição no local de trabalho deve ser monitorizado:

##### 7647-01-0 cloreto de hidrogénio

VLE Valor limite de exposição – concentração máxima: 2 ppm  
A4; Irritação do TRS

##### 7681-57-4 dissulfeto de dissódio

VLE Valor para exposição longa: 5 mg/m<sup>3</sup>  
A4; Irritação do TRS

· **Indicações adicionais:** Foram utilizadas como base as listas válidas à data da elaboração.

### · 8.2 Controlo da exposição

#### · Equipamento de protecção individual:

#### · Medidas gerais de protecção e higiene:

Manter afastado de alimentos, bebidas e forragens.

Despir imediatamente a roupa contaminada e embebida.

Lavar as mãos antes das pausas e no fim do trabalho.

Guardar o vestuário de protecção separadamente.

Evitar o contacto com os olhos.

Evitar o contacto com os olhos e com a pele.

#### · Protecção respiratória:

Utilizar uma máscara respiratória se a exposição for reduzida ou durante um curto espaço de tempo; se esta for mais prolongada ou mais intensa, utilizar uma máscara respiratória independente do ar ambiente.

#### · Protecção das mãos:



Luvas de protecção

O material das luvas tem de ser impermeável e resistente ao produto / à substância / preparação.

Uma vez que não foram realizados testes nesta área, não podemos recomendar um determinado tipo de material para as luvas que seja adequado para o produto / a preparação / a mistura de químicos.

Escolher o material das luvas tendo em consideração a durabilidade, a permeabilidade e a degradação.

#### · Material das luvas

A escolha das luvas mais adequadas não depende apenas do material, mas também de outras características qualitativas e varia de fabricante para fabricante. O facto de o produto ser composto por uma variedade de materiais leva a que não seja possível prever a duração dos mesmos e, conseqüentemente, das luvas, sendo assim necessário proceder a uma verificação antes da sua utilização.

#### · Tempo de penetração no material das luvas

Deve informar-se sobre a validade exacta das suas luvas junto do fabricante e respeitá-la.

#### · Protecção dos olhos:



Óculos de protecção totalmente fechados

## SECÇÃO 9: Propriedades físico-químicas

### · 9.1 Informações sobre propriedades físicas e químicas de base

#### · Informações gerais

#### · Aspeto:

#### · Forma:

Líquido

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· <b>Cor:</b>	Claro
· <b>Odor:</b>	Forte
· <b>Limiar olfactivo:</b>	Não determinado.
· <b>valor pH em 20 °C:</b>	2
· <b>Mudança do estado:</b>	
· <b>Ponto de fusão/ponto de congelação:</b>	Não determinado.
· <b>Ponto de ebulição inicial e intervalo de ebulição:</b>	Não determinado.
· <b>Ponto de inflamação:</b>	Não aplicável.
· <b>Inflamabilidade (sólido, gás):</b>	Não aplicável.
· <b>Temperatura de decomposição:</b>	Não determinado.
· <b>Temperatura de autoignição:</b>	O produto não é auto-inflamável.
· <b>Propriedades explosivas:</b>	O produto não corre o risco de explosão.
· <b>Limites de explosão:</b>	
· <b>Inferior:</b>	Não determinado.
· <b>Superior:</b>	Não determinado.
· <b>Pressão de vapor em 20 °C:</b>	23 hPa
· <b>Densidade:</b>	Não determinado.
· <b>Densidade relativa</b>	Não determinado.
· <b>Densidade de vapor</b>	Não determinado.
· <b>Taxa de evaporação:</b>	Não determinado.
· <b>Solubilidade em / miscibilidade com</b>	
· <b>água:</b>	Pouco misturável.
· <b>Coefficiente de partição: n-octanol/água</b>	Não determinado.
· <b>Viscosidade:</b>	
· <b>Dinâmico:</b>	Não determinado.
· <b>Cinemático:</b>	Não determinado.
· <b>Percentagem de solvente:</b>	
· <b>Água:</b>	89,0 %
· <b>VOC (UE)</b>	0,00 %
· <b>Percentagem de substâncias sólidas:</b>	0,0 %
· <b>9.2 Outras informações</b>	Não existe mais nenhuma informação relevante disponível.

### SECÇÃO 10: Estabilidade e reactividade

- **10.1 Reactividade** Não existe mais nenhuma informação relevante disponível.
- **10.2 Estabilidade química**
- **Decomposição térmica / condições a evitar:** Não existe decomposição se usado de acordo com as especificações.
- **10.3 Possibilidade de reações perigosas** O contacto com o ácido provoca a libertação de gases tóxicos.
- **10.4 Condições a evitar** Não existe mais nenhuma informação relevante disponível.
- **10.5 Materiais incompatíveis:** Não existe mais nenhuma informação relevante disponível.
- **10.6 Produtos de decomposição perigosos:** Não se conhecem produtos de decomposição perigosos.

PT

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### SECÇÃO 11: Informação toxicológica

- **11.1 Informações sobre os efeitos toxicológicos**
- **Toxicidade aguda** Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Efeito de irritabilidade primário:**
- **Corrosão/irritação cutânea**  
Provoca queimaduras na pele e lesões oculares graves.
- **Lesões oculares graves/irritação ocular**  
Provoca lesões oculares graves.
- **Sensibilização respiratória ou cutânea**  
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Efeitos CMR (carcinogenicidade, mutagenicidade e efeitos tóxicos na reprodução)**
- **Mutagenicidade em células germinativas**  
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Carcinogenicidade**  
Pode provocar cancro.
- **Toxicidade reprodutiva** Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Toxicidade para órgãos-alvo específicos (STOT) - exposição única**  
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Toxicidade para órgãos-alvo específicos (STOT) - exposição repetida**  
Com base nos dados disponíveis, os critérios de classificação não são preenchidos.
- **Perigo de aspiração** Com base nos dados disponíveis, os critérios de classificação não são preenchidos.

### SECÇÃO 12: Informação ecológica

- **12.1 Toxicidade**
- **Toxicidade aquática:** Não existe mais nenhuma informação relevante disponível.
- **12.2 Persistência e degradabilidade** Não existe mais nenhuma informação relevante disponível.
- **12.3 Potencial de bioacumulação** Não existe mais nenhuma informação relevante disponível.
- **12.4 Mobilidade no solo** Não existe mais nenhuma informação relevante disponível.
- **Outras indicações ecológicas:**
- **Indicações gerais:**  
Classe de perigo para a água 3 (D) (auto-classificação): muito perigoso para a água  
Não deixar chegar às águas subterrâneas, aos cursos de água nem à canalização, nem em pequenas quantidades.  
Substâncias concentradas, ou seja não neutralizadas, não podem chegar aos esgotos nem às águas.  
Perigo de poluição da água potável mesmo se forem derramadas quantidades muito pequenas no subsolo.
- **12.5 Resultados da avaliação PBT e mPmB**
- **PBT:** Não aplicável.
- **mPmB:** Não aplicável.
- **12.6 Outros efeitos adversos** Não existe mais nenhuma informação relevante disponível.

### SECÇÃO 13: Considerações relativas à eliminação

- **13.1 Métodos de tratamento de resíduos**
- **Recomendação:** Não se pode eliminar juntamente com o lixo doméstico. Não permita que chegue à canalização.
- **Embalagens contaminadas:**
- **Recomendação:** Eliminação residual conforme o regulamento dos serviços públicos.

PT

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### SECÇÃO 14: Informações relativas ao transporte

· 14.1 Número ONU · ADR, IMDG, IATA	UN1789
· 14.2 Designação oficial de transporte da ONU · ADR · IMDG, IATA	1789 ÁCIDO CLORÍDRICO Composto HYDROCHLORIC ACID mixture
· 14.3 Classes de perigo para efeitos de transporte · ADR, IMDG, IATA	
	
· Classe · Rótulo	8 Matérias corrosivas 8
· 14.4 Grupo de embalagem · ADR, IMDG, IATA	II
· 14.5 Perigos para o ambiente:	Não aplicável.
· 14.6 Precauções especiais para o utilizador · Número de identificação de perigo (Nº Kemler): · Nº EMS: · Segregation groups · Stowage Category	Atenção: Matérias corrosivas 80 F-A,S-B Strong acids C
· 14.7 Transporte a granel em conformidade com o anexo II da Convenção MARPOL e o Código IBC	Não aplicável.
· Transporte/outras informações:	
· ADR · Quantidades Limitadas (LQ) · Quantidades exceptuadas (EQ)	1L Código: E2 Quantidade líquida máxima por embalagem interior: 30 ml Quantidade líquida máxima por embalagem exterior: 500 ml
· Categoria de transporte · Código de restrição em túneis	2 E
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1789 ÁCIDO CLORÍDRICO COMPOSTO, 8, II

### SECÇÃO 15: Informação sobre regulamentação

- 15.1 Regulamentação/legislação específica para a substância ou mistura em matéria de saúde, segurança e ambiente
- Diretiva 2012/18/UE
- Substâncias perigosas designadas - ANEXO I Nenhum dos componentes se encontra listado.

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· **Regulamento (CE) n.º 1907/2006 ANEXO XVII Condições de limitação:** 3, 72· **Directiva 2011/65/UE relativa à restrição do uso de determinadas substâncias perigosas em equipamentos eléctricos e electrónicos - Anexo II**

Nenhum dos componentes se encontra listado.

· **Disposições nacionais:**· **Avisos para limitação da exposição no local de trabalho:***Os trabalhadores não devem ser expostos às substâncias perigosas contidas nesta preparação que podem causar cancro. Em casos isolados os serviços públicos podem permitir excepções.*· **15.2 Avaliação da segurança química:** Não foi realizada nenhuma Avaliação de Segurança Química.**SECÇÃO 16: Outras informações***As informações fornecidas baseiam-se no estado actual dos nossos conhecimentos, embora não representem uma garantia das propriedades do produto e não fundamentam uma relação contratual.*· **Frases relevantes***H302 Nocivo por ingestão.**H314 Provoca queimaduras na pele e lesões oculares graves.**H318 Provoca lesões oculares graves.**H335 Pode provocar irritação das vias respiratórias.**H350 Pode provocar cancro.*· **Abreviaturas e acrónimos:***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 Harmonised System of Classification and Labelling of Chemicals**EINECS: European Inventory of Existing Commercial Chemical Substances**ELINCS: European List of Notified Chemical Substances**CAS: Chemical Abstracts Service (division of the American Chemical Society)**VOC: Volatile Organic Compounds (USA, EU)**PBT: Persistent, Bioaccumulative and Toxic**vPvB: very Persistent and very Bioaccumulative**Acute Tox. 4: Toxicidade aguda - via oral – Categoria 4**Skin Corr. 1B: Corrosão/irritação cutânea – Categoria 1B**Eye Dam. 1: Lesões oculares graves/irritação ocular – Categoria 1**Carc. 1B: Carcinogenicidade – Categoria 1B**STOT SE 3: Toxicidade para órgãos-alvo específicos (exposição única) – Categoria 3*

# Ficha de datos de seguridad

## según 1907/2006/CE, Artículo 31

fecha de impresión 07.10.2021

Revisión: 07.10.2021

### SECCIÓN 1: Identificación de la sustancia o la mezcla y de la sociedad o la empresa

- **1.1 Identificador del producto**
- **Nombre comercial:** SCHIFF'S REAGENT
- **Número del artículo:** 26052-05, 26774-01, 26853-01, 26052-06, 26920-04
- **UFI:** XAY0-U0E6-5008-AJA5
- **1.2 Usos pertinentes identificados de la sustancia o de la mezcla y usos desaconsejados**  
No existen más datos relevantes disponibles.
- **Utilización del producto / de la elaboración** Sustancias químicas de laboratorio
- **1.3 Datos del proveedor de la ficha de datos de seguridad**
- **Fabricante/distribuidor:**  
Electron Microscopy Sciences  
1560 Industry Road  
USA-Hatfield, PA 19440  
Tel: 215-412-8400 Fax: 215-412-8450  
email: sgkcck@aol.com  
www.emsdiasum.com
- **Aname**  
C/ Perez Galdos no. 2  
28693 Quijorna  
Madrid, Spain  
Tel: +34.91.816.89.50  
Fax: +34.91.816.85.94  
email: ventas@aname.es
- **Área de información:** Product safety department
- **1.4 Teléfono de emergencia:**  
ChemTrec 1-800-424-9300 Contract CCN7661  
1-703-527-3887

### SECCIÓN 2: Identificación de los peligros

- **2.1 Clasificación de la sustancia o de la mezcla**
- **Clasificación con arreglo al Reglamento (CE) n° 1272/2008**



GHS08 peligro para la salud

Carc. 1B H350 Puede provocar cáncer.



GHS05 corrosión

Skin Corr. 1B H314 Provoca quemaduras graves en la piel y lesiones oculares graves.

Eye Dam. 1 H318 Provoca lesiones oculares graves.

- **2.2 Elementos de la etiqueta**
- **Etiquetado con arreglo al Reglamento (CE) n° 1272/2008**  
El producto se ha clasificado y etiquetado de conformidad con el reglamento CLP.

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· **Pictogramas de peligro**

GHS05 GHS08

· **Palabra de advertencia Peligro**· **Componentes peligrosos a indicar en el etiquetaje:**

cloruro de hidrogeno  
4,4'-(4-iminociclohexa-2,5-dienilidenometilen)dianilina, clorhidrato  
Metabisulfito sódico

· **Indicaciones de peligro**

H314 Provoca quemaduras graves en la piel y lesiones oculares graves.  
H350 Puede provocar cáncer.

· **Consejos de prudencia**

P303+P361+P353 EN CASO DE CONTACTO CON LA PIEL (o el pelo): Quitar inmediatamente toda la ropa contaminada. Enjuagar la piel con agua [o ducharse].

P305+P351+P338 EN CASO DE CONTACTO CON LOS OJOS: Enjuagar con agua cuidadosamente durante varios minutos. Quitar las lentes de contacto cuando estén presentes y pueda hacerse con facilidad. Proseguir con el lavado.

P310 Llamar inmediatamente a un CENTRO DE TOXICOLOGÍA/médico.

P321 Se necesita un tratamiento específico (ver en esta etiqueta).

P405 Guardar bajo llave.

P501 Eliminar el contenido o el recipiente conforme a la reglamentación local/regional/nacional/internacional.

· **Datos adicionales:**

EUH031 En contacto con ácidos libera gases tóxicos.

· **2.3 Otros peligros**· **Resultados de la valoración PBT y mPmB**

· **PBT:** No aplicable.

· **mPmB:** No aplicable.

### SECCIÓN 3: Composición/información sobre los componentes

· **3.2 Caracterización química: Mezclas**

· **Descripción:** Mezcla formada por las sustancias especificadas a continuación con adiciones no peligrosas.

· **Componentes peligrosos:**

CAS: 7647-01-0 EINECS: 231-595-7	cloruro de hidrogeno Skin Corr. 1B, H314; Eye Dam. 1, H318; Acute Tox. 4, H302; STOT SE 3, H335	>2,5-≤10%
CAS: 7681-57-4 EINECS: 231-673-0	Metabisulfito sódico Eye Dam. 1, H318; Acute Tox. 4, H302	>2,5-≤10%
CAS: 569-61-9 EINECS: 209-321-2	4,4'-(4-iminociclohexa-2,5-dienilidenometilen)dianilina, clorhidrato Carc. 1B, H350	≤2,5%

· **Indicaciones adicionales:** El texto de los posibles riesgos aquí indicados se puede consultar en el capítulo 16.

### SECCIÓN 4: Primeros auxilios

· **4.1 Descripción de los primeros auxilios**

· **Instrucciones generales:** Quitarse de inmediato toda prenda contaminada con el producto.

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- **En caso de inhalación del producto:**  
Las personas desmayadas deben tenderse y transportarse de lado con la suficiente estabilidad.
- **En caso de contacto con la piel:** Lavar inmediatamente con agua y jabón y enjuagar bien.
- **En caso de con los ojos:**  
Limpiar los ojos abiertos durante varios minutos con agua corriente y consultar un médico.
- **En caso de ingestión:** Beber mucha agua a respirar aire fresco. Solicitar asistencia médica inmediatamente.
- **4.2 Principales síntomas y efectos, agudos y retardados** No existen más datos relevantes disponibles.
- **4.3 Indicación de toda atención médica y de los tratamientos especiales que deban dispensarse inmediatamente**  
No existen más datos relevantes disponibles.

### SECCIÓN 5: Medidas de lucha contra incendios

- **5.1 Medios de extinción**
- **Sustancias extintoras apropiadas:** Combatir los incendios con medidas adaptados al ambiente circundante.
- **5.2 Peligros específicos derivados de la sustancia o la mezcla** No existen más datos relevantes disponibles.
- **5.3 Recomendaciones para el personal de lucha contra incendios**
- **Equipo especial de protección:** Colocarse la protección respiratoria.

### SECCIÓN 6: Medidas en caso de vertido accidental

- **6.1 Precauciones personales, equipo de protección y procedimientos de emergencia**  
Colocarse el aparato de protección respiratoria.  
Llevar puesto equipo de protección. Mantener alejadas las personas sin protección.
- **6.2 Precauciones relativas al medio ambiente:**  
Evitar que penetre en la canalización /aguas de superficie /agua subterráneas.
- **6.3 Métodos y material de contención y de limpieza:**  
Quitar con material absorbente (arena, kieselgur, aglutinante de ácidos, aglutinante universal, aserrín).  
Utilizar un neutralizador.  
Desechar el material contaminado como vertido según ítem 13.  
Asegurar suficiente ventilación.
- **6.4 Referencia a otras secciones**  
Ver capítulo 7 para mayor información sobre una manipulación segura.  
Ver capítulo 8 para mayor información sobre el equipo personal de protección.  
Para mayor información sobre cómo desechar el producto, ver capítulo 13.

### SECCIÓN 7: Manipulación y almacenamiento

- **7.1 Precauciones para una manipulación segura**  
Asegurar suficiente ventilación /aspiración en el puesto de trabajo.  
Abrir y manejar el recipiente con cuidado.  
Evitar la formación de aerosoles.
- **Prevención de incendios y explosiones:** Tener preparados los aparatos respiratorios.
- **7.2 Condiciones de almacenamiento seguro, incluidas posibles incompatibilidades**
- **Almacenamiento:**
- **Exigencias con respecto al almacén y los recipientes:** No se requieren medidas especiales.
- **Normas en caso de un almacenamiento conjunto:** No almacenar junto con ácidos.
- **Indicaciones adicionales sobre las condiciones de almacenamiento:**  
Mantener el recipiente cerrado herméticamente.
- **7.3 Usos específicos finales** No existen más datos relevantes disponibles.

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### SECCIÓN 8: Controles de exposición/protección individual

· **Instrucciones adicionales para el acondicionamiento de instalaciones técnicas:**

Sin datos adicionales, ver punto 7.

· **8.1 Parámetros de control**

· **Componentes con valores límite admisibles que deben controlarse en el puesto de trabajo:**

**7647-01-0 cloruro de hidrogeno**

LEP	Valor de corta duración: 15 mg/m <sup>3</sup> , 10 ppm
	Valor de larga duración: 7,6 mg/m <sup>3</sup> , 5 ppm
	VLI

**7681-57-4 Metabisulfito sódico**

LEP	Valor de larga duración: 5 mg/m <sup>3</sup>
	s

· **Indicaciones adicionales:** Como base se han utilizado las listas vigentes en el momento de la elaboración.

· **8.2 Controles de la exposición**

· **Equipo de protección individual:**

· **Medidas generales de protección e higiene:**

Mantener alejado de alimentos, bebidas y alimentos para animales.

Quitarse de inmediato la ropa ensuciada o impregnada.

Lavarse las manos antes de las pausas y al final del trabajo.

Guardar la ropa protectora por separado.

Evitar el contacto con los ojos.

Evitar el contacto con los ojos y la piel.

· **Protección respiratoria:**

Si la exposición va a ser breve o de poca intensidad, colocarse una máscara respiratoria. Para una exposición más intensa o de mayor duración, usar un aparato de respiración autónomo.

· **Protección de manos:**



Guantes de protección

El material del guante deberá ser impermeable y resistente al producto / substancia / preparado.

Ante la ausencia de tests específicos, no se puede recomendar ningún material específico para guantes de protección contra el producto / preparado / mezcla de substancias químicas.

Selección del material de los guantes en función de los tiempos de rotura, grado de permeabilidad y degradación.

· **Material de los guantes**

La elección del guante adecuado no depende únicamente del material, sino también de otras características de calidad, que pueden variar de un fabricante a otro. Teniendo en cuenta que el producto está fabricado a partir de diferentes materiales, su calidad no puede ser evaluada de antemano, de modo que los guantes deberán ser controlados antes de su utilización.

· **Tiempo de penetración del material de los guantes**

El tiempo de resistencia a la penetración exacto deberá ser pedido al fabricante de los guantes. Este tiempo debe ser respetado.

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· **Protección de ojos:**

Gafas de protección herméticas

### SECCIÓN 9: Propiedades físicas y químicas

· **9.1 Información sobre propiedades físicas y químicas básicas**· **Datos generales**· **Aspecto:**· **Forma:**

Líquido

· **Color:**

Claro

· **Olor:**

Intenso

· **Umbral olfativo:**

No determinado.

· **valor pH a 20 °C:**

2

· **Cambio de estado**· **Punto de fusión/punto de congelación:**

Indeterminado.

· **Punto inicial de ebullición e intervalo de ebullición:**

Indeterminado.

· **Punto de inflamación:**

No aplicable.

· **Inflamabilidad (sólido, gas):**

No aplicable.

· **Temperatura de descomposición:**

No determinado.

· **Temperatura de auto-inflamación:**

El producto no es autoinflamable.

· **Propiedades explosivas:**

El producto no es explosivo.

· **Límites de explosión:**· **Inferior:**

No determinado.

· **Superior:**

No determinado.

· **Presión de vapor a 20 °C:**

23 hPa

· **Densidad:**

Indeterminado.

· **Densidad relativa**

No determinado.

· **Densidad de vapor**

No determinado.

· **Tasa de evaporación:**

No determinado.

· **Solubilidad en / miscibilidad con**· **agua:**

Poco o no mezclable.

· **Coeficiente de reparto: n-octanol/agua:**

No determinado.

· **Viscosidad:**· **Dinámica:**

No determinado.

· **Cinemática:**

No determinado.

· **Concentración del disolvente:**· **Agua:**

89,0 %

· **VOC (CE)**

0,00 %

· **Contenido de cuerpos sólidos:**

0,0 %

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· 9.2 Otros datos

No existen más datos relevantes disponibles.

### SECCIÓN 10: Estabilidad y reactividad

- **10.1 Reactividad** No existen más datos relevantes disponibles.
- **10.2 Estabilidad química**
- **Descomposición térmica / condiciones que deben evitarse:** No se descompone al emplearse adecuadamente.
- **10.3 Posibilidad de reacciones peligrosas** Al entrar en contacto ácidos se liberan gases tóxicos.
- **10.4 Condiciones que deben evitarse** No existen más datos relevantes disponibles.
- **10.5 Materiales incompatibles:** No existen más datos relevantes disponibles.
- **10.6 Productos de descomposición peligrosos:** No se conocen productos de descomposición peligrosos.

### SECCIÓN 11: Información toxicológica

- **11.1 Información sobre los efectos toxicológicos**
- **Toxicidad aguda** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Efecto estimulante primario:**
- **Corrosión o irritación cutáneas**  
Provoca quemaduras graves en la piel y lesiones oculares graves.
- **Lesiones o irritación ocular graves**  
Provoca lesiones oculares graves.
- **Sensibilización respiratoria o cutánea**  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Efectos CMR (carcinogenicidad, mutagenicidad y toxicidad para la reproducción)**
- **Mutagenicidad en células germinales**  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Carcinogenicidad**  
Puede provocar cáncer.
- **Toxicidad para la reproducción** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Toxicidad específica en determinados órganos (STOT) – exposición única**  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Toxicidad específica en determinados órganos (STOT) – exposición repetida**  
A la vista de los datos disponibles, no se cumplen los criterios de clasificación.
- **Peligro de aspiración** A la vista de los datos disponibles, no se cumplen los criterios de clasificación.

### SECCIÓN 12: Información ecológica

- **12.1 Toxicidad**
- **Toxicidad acuática:** No existen más datos relevantes disponibles.
- **12.2 Persistencia y degradabilidad** No existen más datos relevantes disponibles.
- **12.3 Potencial de bioacumulación** No existen más datos relevantes disponibles.
- **12.4 Movilidad en el suelo** No existen más datos relevantes disponibles.
- **Indicaciones medioambientales adicionales:**
- **Indicaciones generales:**  
Nivel de riesgo para el agua 3 (autoclasiación): muy peligroso para el agua  
No dejar que se infiltre en aguas subterráneas, aguas superficiales o en alcantarillados, ni siquiera en pequeñas cantidades.  
En estado no diluido o no neutralizado, no verter en el alcantarillado o en otros sistemas de desagüe.  
Una cantidad ínfima vertida en el subsuelo ya representa un peligro para el agua potable.

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- 12.5 Resultados de la valoración PBT y mPmB
- PBT: No aplicable.
- mPmB: No aplicable.
- 12.6 Otros efectos adversos No existen más datos relevantes disponibles.

### SECCIÓN 13: Consideraciones relativas a la eliminación

- 13.1 Métodos para el tratamiento de residuos
- Recomendación: No debe desecharse con la basura doméstica. No debe llegar al alcantarillado.
- Embalajes sin limpiar:
- Recomendación: Eliminar conforme a las disposiciones oficiales.

### SECCIÓN 14: Información relativa al transporte

- |  |   |
|--|---|
| · 14.1 Número ONU  |   |
| · ADR, IMDG, IATA  | UN1789  |
| · 14.2 Designación oficial de transporte de las Naciones Unidas                        |   |
| · ADR  | 1789 ÁCIDO CLORHÍDRICO Mezcla   |
| · IMDG, IATA   | HYDROCHLORIC ACID mixture   |
| · 14.3 Clase(s) de peligro para el transporte  |   |
| · ADR, IMDG, IATA  |   |
|     |   |
| · Clase  | 8 Materias corrosivas   |
| · Etiqueta   | 8   |
| · 14.4 Grupo de embalaje   |   |
| · ADR, IMDG, IATA  | II  |
| · 14.5 Peligros para el medio ambiente:  | No aplicable.   |
| · 14.6 Precauciones particulares para los usuarios                                     | Atención: Materias corrosivas   |
| · Número de identificación de peligro (Número Kemler):                                 | 80  |
| · Número EMS:  | F-A,S-B   |
| · Segregation groups   | Strong acids  |
| · Stowage Category   | C   |
| · 14.7 Transporte a granel con arreglo al anexo II del Convenio MARPOL y el Código IBC | No aplicable.   |
| · Transporte/datos adicionales:  |   |
| · ADR  |   |
| · Cantidades limitadas (LQ)  | 1L  |
| · Cantidades exceptuadas (EQ)  | Código: E2<br>Cantidad neta máxima por envase interior: 30 ml<br>Cantidad neta máxima por embalaje exterior: 500 ml |
| · Categoría de transporte  | 2   |

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· Código de restricción del túnel	E
· <b>IMDG</b>	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· "Reglamentación Modelo" de la UNECE:	UN 1789 ÁCIDO CLORHÍDRICO MEZCLA, 8, II

### SECCIÓN 15: Información reglamentaria

- **15.1 Reglamentación y legislación en materia de seguridad, salud y medio ambiente específicas para la sustancia o la mezcla**
- Directiva 2012/18/UE
- Sustancias peligrosas nominadas - ANEXO I ninguno de los componentes está incluido en una lista
- REGLAMENTO (CE) n° 1907/2006 ANEXO XVII Restricciones: 3, 72
- Directiva 2011/65/UE sobre restricciones a la utilización de determinadas sustancias peligrosas en aparatos eléctricos y electrónicos - Anexo II  
ninguno de los componentes está incluido en una lista
- Disposiciones nacionales:
- Indicaciones sobre las limitaciones de trabajo:  
Los empleados no deben exponerse a las sustancias cancerígenas contenidas en el producto. En casos aislados las autoridades pueden hacer excepciones.
- **15.2 Evaluación de la seguridad química:** Una evaluación de la seguridad química no se ha llevado a cabo.

### SECCIÓN 16: Otra información

Los datos se fundan en el estado actual de nuestros conocimientos, pero no constituyen garantía alguna de cualidades del producto y no generan ninguna relación jurídica contractual.

- **Frases relevantes**  
H302 Nocivo en caso de ingestión.  
H314 Provoca quemaduras graves en la piel y lesiones oculares graves.  
H318 Provoca lesiones oculares graves.  
H335 Puede irritar las vías respiratorias.  
H350 Puede provocar cáncer.
- **Abreviaturas y acrónimos:**  
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 Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
VOC: Volatile Organic Compounds (USA, EU)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Acute Tox. 4: Toxicidad aguda - oral - Categoría 4  
Skin Corr. 1B: Corrosión o irritación cutáneas - Categoría 1B  
Eye Dam. 1: Lesiones oculares graves o irritación ocular - Categoría 1  
Carc. 1B: Carcinogenicidad - Categoría 1B  
STOT SE 3: Toxicidad específica en determinados órganos ( exposición única) - Categoría 3