

**Conductivity Standard 1413  $\mu$ S/cm**

Material number 238986

Page: 1 of 5

**1. Product and company identification****Product identifier**Trade name: Conductivity Standard 1413  $\mu$ S/cm**Relevant identified uses of the substance or mixture and uses advised against**

General use: Calibration solution

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

Company name: HAMILTON Bonaduz AG

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Switzerland

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Dept. responsible for information:

Susanne Näf-Rüdiger,

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**Emergency telephone number**

GIZ-Nord, Germany, Telephone: +49 (0)551-19240

**2. Hazards identification****Emergency overview**

Appearance: Physical state: liquid

Color: colorless

Odor: odorless

**Regulatory status**

This material is not considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT in Canada.

**Information pertaining to special dangers for human and environment**

see section 11: Toxicological information

**3. Composition / Information on ingredients**

Chemical characterization: aqueous solution

**4. First-aid measures**

In case of inhalation: Move victim to fresh air. Seek medical attention.

In case of skin contact: Remove residues with water. Change contaminated clothing.  
In case of skin reactions, consult a physician.

After eye contact: With eyelids open, wash out eyes for several minutes under flowing water. In case of troubles or persistent symptoms, consult an ophthalmologist.

After swallowing: Rinse mouth and drink large quantities of water.  
If you feel unwell, seek medical advice.

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

no data available

**Information to physician**

Treat symptomatically.

**5. Firefighting measures**

Flash point/flash point range:

not combustible

Suitable extinguishing media:

Product is non-combustible. Extinguishing materials should therefore be selected according to surroundings.

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

Fires in the immediate vicinity may cause the development of dangerous vapors.

Special protective equipment for firefighters:

In case of surrounding fires: Wear self-contained breathing apparatus.

**6. Accidental release measures**

Personal precautions: Avoid contact with skin, eyes, and clothing.

Environmental measures: Do not allow to penetrate into soil, waterbodies or drains.

Methods for cleaning up: Soak up with absorbent materials such as sand, siliceous earth, acid- or universal binder. Store in special closed containers and dispose of according to ordinance. Wash spill area with plenty of water.

**7. Handling and storage****Handling**

Advices on safe handling: Avoid prolonged and intensive skin contact.

**Storage**

Requirements for storerooms and containers:

Keep container tightly closed. Store at room temperature.

**Specific use(s)**

calibration solution

**8. Exposure controls / personal protection****Engineering controls**

Provide good ventilation and/or an exhaust system in the work area.  
See also information in chapter 7, section storage.

Eye protection: Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.

Body protection: Wear suitable protective clothing.

**Conductivity Standard 1413 µS/cm**

Material number 238986

Page: 3 of 5

Protective gloves according to OSHA Standard - 29 CFR: 1910.138.  
Glove material: natural rubber, nitrile rubber, butyl caoutchouc (butyl rubber).  
Breakthrough time: > 480 min.  
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

**Personal protection equipment**

Respiratory protection: Provide adequate ventilation.

**General protection and hygiene measures**

Change contaminated clothing.  
Wash hands before breaks and after work.

**9. Physical and chemical properties****Information on basic physical and chemical properties**

Appearance:	Physical state: liquid Color: colorless
Odor:	odorless
pH value:	at 20 °C: 4.0 - 8.0
Initial boiling point and boiling range:	approx. 100 °C
Flash point/flash point range:	not combustible
Density:	at 20 °C: approx. 1.0 g/mL
Water solubility:	at 20 °C: infinitely soluble

**Additional information**

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**10. Stability and reactivity**

Reactivity:	no data available
Chemical stability:	Product is stable under normal storage conditions.
Possibility of hazardous reactions	No hazardous reactions known.
Materials to avoid:	strong acids and alkalis
Hazardous decomposition products:	Fires in the immediate vicinity may cause the development of dangerous vapors.

## 11. Toxicological information

### Toxicological tests

Toxicological effects:

- Acute toxicity (oral): Lack of data.
- Acute toxicity (dermal): Lack of data.
- Acute toxicity (inhalative): Lack of data.
- Skin corrosion/irritation: Lack of data.
- Eye damage/irritation: Lack of data.
- Sensitisation to the respiratory tract: Lack of data.
- Skin sensitisation: Lack of data.
- Germ cell mutagenicity/Genotoxicity: Lack of data.
- Carcinogenicity: Lack of data.
- Reproductive toxicity: Lack of data.
- Effects on or via lactation: Lack of data.
- Specific target organ toxicity (single exposure): Lack of data.
- Specific target organ toxicity (repeated exposure): Lack of data.
- Aspiration hazard: Lack of data.

## 12. Ecological information

### Additional ecological information

General information: Do not allow to enter undiluted resp. in large quantities into surface water or into drains.

## 13. Disposal considerations

### Product

Recommendation: Dispose of waste according to applicable legislation.

### Contaminated packaging

Recommendation: Dispose of waste according to applicable legislation.  
Non-contaminated packages may be recycled.

## 14. Transport information

### USA: Department of Transportation (DOT)

Proper shipping name: Not controlled under DOT

### Sea transport (IMDG)

Proper shipping name: Not restricted

Marine pollutant: No

### Air transport (IATA)

Proper shipping name: Not restricted

### Further information

No dangerous good in sense of these transport regulations.

**Conductivity Standard 1413  $\mu\text{S}/\text{cm}$** 

Material number 238986

Page: 5 of 5

**15. Regulatory information****National regulations - EC member states****Labeling (67/548/EEC or 1999/45/EC)**

Code letter and hazard symbol:

not applicable

R phrase(s): not applicable

S phrase(s): not applicable

**National regulations - Great Britain**

Hazchem-Code: -

**16. Other information**

Hazard rating systems:



NFPA Hazard Rating:

Health: 1 (Slight)

Fire: 0 (Minimal)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 1 (Slight)

Flammability: 0 (Minimal)

Physical Hazard: 0 (Minimal)

Personal Protection: B

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
B	

Reason of change: General revision

Date of first version: 03.03.2011

**Department issuing data sheet**

Contact person: see section 1: Dept. responsible for information

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.