

**Conductivity Standard 147  $\mu$ S/cm**

Material number 238985

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**1. Product and company identification****Product identifier**Trade name: Conductivity Standard 147  $\mu$ 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,

Telephone: +41 81 660 62 76, E-mail [SNaef@hamilton.ch](mailto:SNaef@hamilton.ch)**Emergency telephone number**

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

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

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**

After 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.

Protective gloves according to OSHA Standard - 29 CFR: 1910.138.

Glove material: natural rubber, nitrile rubber, butyl caoutchouc (butyl rubber).

Breakthrough time: &gt; 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.

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**9. Physical and chemical properties****Appearance**

Physical state: liquid  
Color: colorless  
Odor: odorless

**Important health, safety and environmental information**

Boiling temperature / boiling range: approx. 212 °F  
Flash point / flash point range: not combustible  
Density: at 68 °F: approx. 1 g/mL  
pH value: at 68 °F: 4-8  
Water solubility: at 68 °F: infinitely soluble

**10. Stability and reactivity**

Reactivity: No data available  
Chemical stability: Product is stable under normal storage conditions.  
Polymerisation: 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.

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**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

**Canada: Transportation of Dangerous Goods (TDG)**

Shipping name: Not controlled under TDG

**Further information**

No dangerous good in sense of these transport regulations.

**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.