1. IDENTIFICATION

Product identifier
Product Name: Sodium Chloride Standard Solution 1000 ± 5 mg/l as NaCl

Other means of identification
Product Code(s): 210542

Safety data sheet number: M00374

Recommended use of the chemical and restrictions on use
Recommended Use: Laboratory reagent. Standard solution.
Uses advised against: None.
Restrictions on use: None.

Details of the supplier of the safety data sheet
Manufacturer Address:
Hach Company P.O.Box 389  Loveland, CO 80539 USA +1(970) 669-3050

Emergency telephone number
+1(303) 623-5716 - 24 Hour Service  +1(515)232-2533 - 8am - 4pm CST

2. HAZARDS IDENTIFICATION

Classification
Regulatory Status:
This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Hazards not otherwise classified (HNOC)
Not applicable

Label elements

Hazard statements
The product contains no substances which at their given concentration, are considered to be hazardous to health

Other Information
Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS
4. FIRST AID MEASURES

Description of first aid measures

General advice In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Eye contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms persist, call a physician.

Skin contact IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If symptoms persist, call a physician.

Inhalation IF INHALED: Remove person to fresh air and keep comfortable for breathing. If symptoms persist, call a physician.

Ingestion IF SWALLOWED: Rinse Mouth. If symptoms persist, call a physician.

Self-protection of the first aider Use personal protective equipment as required. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Most important symptoms and effects, both acute and delayed

Symptoms See Section 11: TOXICOLOGICAL INFORMATION.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Flammable properties Substance does not burn.

Specific hazards arising from the chemical This product will not burn or explode.

Hazardous combustion products This material will not burn.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES
U.S. Notice

Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should respond to a spill involving chemicals.

Personal precautions, protective equipment and emergency procedures

Personal precautions
Evacuate personnel to safe areas. Do not touch or walk through spilled material. Ventilate affected area. Use personal protective equipment as required.

For emergency responders
Use personal protection recommended in Section 8.

Environmental precautions
See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment
Prevent further leakage or spillage if safe to do so. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up
Neutralize spill if necessary. Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly. Dispose of in accordance with local, state and federal regulations or laws.

Emergency Response Guide Number
Not applicable

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Do not breathe dust/fume/gas/mist/vapors/spray.

Conditions for safe storage, including any incompatibilities

Storage Conditions
Keep containers tightly closed in a dry, cool and well-ventilated place. Keep in properly labeled containers.

Flammability class
Not applicable

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines
This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Legend
See section 16 for terms and abbreviations

Appropriate engineering controls

Engineering Controls
Showers
Individual protection measures, such as personal protective equipment

Eye/face protection  Wear safety glasses with side shields (or goggles).
Skin and body protection  Wear protective gloves and protective clothing.
Respiratory protection  In case of insufficient ventilation, wear suitable respiratory equipment.
General Hygiene Considerations  Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Take off all contaminated clothing and wash it before reuse. Wash hands thoroughly after handling. Regular cleaning of equipment, work area and clothing is recommended.

Environmental exposure controls
Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td></td>
</tr>
<tr>
<td>Gas Under Pressure</td>
<td>Not classified according to GHS criteria</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>aqueous solution</td>
<td>Color colorless</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
<td>Odor threshold Not applicable</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>7.0</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>~ 0 °C / 32 °F</td>
<td>Estimation based on theoretical calculation</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>~ 100 °C / 212 °F</td>
<td>Estimation based on theoretical calculation</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>1 (water = 1)</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>17.477 mm Hg / 2.33 kPa at 20 °C / 68 °F</td>
<td></td>
</tr>
<tr>
<td>Vapor density (air = 1)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Specific gravity (water = 1 / air = 1)</td>
<td>0.99</td>
<td></td>
</tr>
<tr>
<td>Partition Coefficient (n-octanol/water)</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Soil Organic Carbon-Water Partition Coefficient</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No data available</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>
**Product Code(s)**  210542

**Issue Date**  03-Oct-2017

**Product Name**  Sodium Chloride Standard Solution  1000 ± 5 mg/l as NaCl

**Revision Date**  03-Oct-2017

**Version**  3.1

**Page**  5 / 12

**Dynamic viscosity**  
0.99 cP (mPa s) at 20 °C / 68 °F

**Kinematic viscosity**  
1 cSt (mm²/s) at 20 °C / 68 °F

**Solubility(ies)**

**Water solubility**

<table>
<thead>
<tr>
<th>Water solubility classification</th>
<th>Water solubility</th>
<th>Water Solubility Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soluble</td>
<td>&gt; 1000 mg/L</td>
<td>25 °C / 77 °F</td>
</tr>
</tbody>
</table>

**Solubility in other solvents**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Solubility classification</th>
<th>Solubility</th>
<th>Solubility Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>None reported</td>
<td>No information available</td>
<td>No data available</td>
<td>No information available</td>
</tr>
</tbody>
</table>

**Other Information**

**Metal Corrosivity**  
Not classified as corrosive to metal according to GHS criteria

Steel Corrosion Rate  
No data available

Aluminum Corrosion Rate  
No data available

**Bulk density**  
Not applicable

**Explosive properties**  
Not classified according to GHS criteria.

**Explosion data**  
No data available

Upper explosion limit  
No data available

Lower explosion limit  
No data available

**Flammable properties**  
Not classified as flammable according to GHS criteria.

**Flammability Limit in Air**

Upper flammability limit:  
No data available

Lower flammability limit:  
No data available

**Flash point**  
No data available

**Method**  
No information available

**Oxidizing properties**  
Not classified according to GHS criteria.

**Reactivity properties**  
Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.

### 10. STABILITY AND REACTIVITY

**Reactivity properties**

Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.
Chemical stability
Stable under recommended storage conditions.

Special dangers of the product
None reported

Possibility of Hazardous Reactions
None under normal processing.

Hazardous polymerization
Hazardous polymerization does not occur.

Conditions to avoid
Extremes of temperature and direct sunlight. Incompatible materials.

Incompatible materials

Hazardous Decomposition Products
None known based on information supplied.

Explosive properties
Not classified according to GHS criteria.

Upper explosion limit
No data available

Lower explosion limit
No data available

Autoignition temperature
No data available

Sensitivity to Static Discharge
None reported

Sensitivity to Mechanical Impact
None reported

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

<table>
<thead>
<tr>
<th>Product Information</th>
<th>Product does not present an acute toxicity hazard based on known or supplied information.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>No known effect based on information supplied.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>No known effect based on information supplied.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>No known effect based on information supplied.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>No known effect based on information supplied.</td>
</tr>
<tr>
<td>Aggravated Medical Conditions</td>
<td>None known.</td>
</tr>
<tr>
<td>Toxicologically synergistic products</td>
<td>None known.</td>
</tr>
<tr>
<td>Toxicokinetics, metabolism and distribution</td>
<td>No information available.</td>
</tr>
</tbody>
</table>

Product Acute Toxicity Data

| Oral Exposure Route          | No data available                      |
| Dermal Exposure Route        | No data available                      |
| Inhalation (Dust/Mist) Exposure Route | No data available                  |
| Inhalation (Vapor) Exposure Route | No data available                  |
| Inhalation (Gas) Exposure Route | No data available                  |
Acute Toxicity Estimations (ATE)

Ingredient Acute Toxicity Data
Oral Exposure Route  
Dermal Exposure Route  
Inhalation (Dust/Mist) Exposure Route  
Inhalation (Vapor) Exposure Route  
Inhalation (Gas) Exposure Route  

Product Specific Target Organ Toxicity Single Exposure Data
Oral Exposure Route  
Dermal Exposure Route  
Inhalation (Dust/Mist) Exposure Route  
Inhalation (Vapor) Exposure Route  
Inhalation (Gas) Exposure Route  

Aspiration toxicity
If available, see data below

Kinematic viscosity
1 cSt (mm²/s)

Ingredient Specific Target Organ Toxicity Single Exposure Data
Oral Exposure Route  
Dermal Exposure Route  
Inhalation (Dust/Mist) Exposure Route  
Inhalation (Vapor) Exposure Route  
Inhalation (Gas) Exposure Route  

Product Skin Corrosion/Irritation Data
No data available.

Ingredient Skin Corrosion/Irritation Data
If available, see data below

Product Serious Eye Damage/Eye Irritation Data
No data available.

Ingredient Eye Damage/Eye Irritation Data
If available, see data below

Sensitization Information

Product Sensitization Data
Skin Sensitization Exposure Route  
Respiratory Sensitization Exposure Route  

Ingredient Sensitization Data
Skin Sensitization Exposure Route  
Respiratory Sensitization Exposure Route  

Chronic Toxicity Information

Product Specific Target Organ Toxicity Repeat Dose Data
Oral Exposure Route  
Dermal Exposure Route  
Inhalation (Dust/Mist) Exposure Route  
Inhalation (Vapor) Exposure Route  
Inhalation (Gas) Exposure Route  

Ingredient Specific Target Organ Toxicity Repeat Exposure Data

Oral Exposure Route
Dermal Exposure Route
Inhalation (Dust/Mist) Exposure Route
Inhalation (Vapor) Exposure Route
Inhalation (Gas) Exposure Route

If available, see data below

Product Carcinogenicity Data

Oral Exposure Route
Dermal Exposure Route
Inhalation (Dust/Mist) Exposure Route
Inhalation (Vapor) Exposure Route
Inhalation (Gas) Exposure Route

No data available

Ingredient Carcinogenicity Data

Legend

ACGIH (American Conference of Governmental Industrial Hygienists) Does not apply
IARC (International Agency for Research on Cancer) Does not apply
NTP (National Toxicology Program) Does not apply
OSHA (Occupational Safety and Health Administration of the US Department of Labor) Does not apply

Oral Exposure Route
Dermal Exposure Route
Inhalation (Dust/Mist) Exposure Route
Inhalation (Vapor) Exposure Route
Inhalation (Gas) Exposure Route

If available, see data below

Product Germ Cell Mutagenicity invitro Data

No data available.

Ingredient Germ Cell Mutagenicity invitro Data

No data available

Product Germ Cell Mutagenicity invivo Data

Oral Exposure Route
Dermal Exposure Route
Inhalation (Dust/Mist) Exposure Route
Inhalation (Vapor) Exposure Route
Inhalation (Gas) Exposure Route

No data available

Ingredient Germ Cell Mutagenicity invivo Data

No data available

Product Reproductive Toxicity Data

Oral Exposure Route
Dermal Exposure Route
Inhalation (Dust/Mist) Exposure Route
Inhalation (Vapor) Exposure Route
Inhalation (Gas) Exposure Route

No data available

Ingredient Reproductive Toxicity Data

Oral Exposure Route
Inhalation (Dust/Mist) Exposure Route

If available, see data below
12. ECOLOGICAL INFORMATION

Ecotoxicity

Based on the classification principles, not classified as hazardous to the environment.

**Product Ecological Data**

Aquatic toxicity

Fish: No data available
Crustacea: No data available
Algae: No data available

**Ingredient Ecological Data**

Aquatic toxicity

Fish: If available, see ingredient data below
Crustacea: If available, see ingredient data below
Algae: No data available

**Other Information**

Persistence and degradability

Product Biodegradability Data
No data available.

Ingredient Biodegradability Data
No data available

Bioaccumulation

Product Bioaccumulation Data
No data available.

Partition Coefficient (n-octanol/water)
Not applicable

Ingredient Bioaccumulation Data
No data available

Mobility

Product Information

Soil Organic Carbon-Water Partition Coefficient
Not applicable

Water solubility

<table>
<thead>
<tr>
<th>Water solubility classification</th>
<th>Water solubility</th>
<th>Water Solubility Temperature</th>
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</thead>
<tbody>
<tr>
<td>Soluble</td>
<td>&gt; 1000 mg/L</td>
<td>25 °C / 77 °F</td>
</tr>
</tbody>
</table>

Ingredient Information
13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes  Disposal should be in accordance with applicable regional, national, and local laws and regulations.

Contaminated packaging  Working in a well-ventilated area. Rinse three times with an appropriate solvent. Collect rinsate and dispose of according to local, state, or federal regulations. Dispose of empty container as normal trash. In the US, rinsate from empty containers is classified as hazardous waste and should be disposed of at an E.P.A. approved facility. Rinsate from empty containers may contain sufficient product to require disposal as hazardous waste in countries other than the US. Improper disposal or reuse of this container may be dangerous and illegal. Disposal should be in accordance with applicable regional, national, and local laws and regulations.

Special instructions for disposal  Open cold water tap completely, slowly pour the material to the drain. Flush system with plenty of water.

14. TRANSPORT INFORMATION

U.S. DOT  Not regulated
TDG  Not regulated
IATA  Not regulated
IMDG  Not regulated

Additional information
There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is not in a reagent set or kit, the classification given above applies. If the item is part of a reagent set or kit the classification would change to the following: UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III. If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

National Inventories
TSCA  Complies
DSL/NDSL  Complies

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

International Inventories
EINECS/ELINCS  Complies
ENCS  Complies
IECSC  Complies
KECL  Complies
PICCS  Complies

ENG / AGHS
Product Code(s) 210542
Product Name Sodium Chloride Standard Solution 1000 ± 5 mg/l as NaCl
Issue Date 03-Oct-2017
Revision Date 03-Oct-2017
Version 3.1

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
TCSI - Taiwan Chemical Substances Inventory
AICS - Australian Inventory of Chemical Substances
NZIoC - New Zealand Inventory of Chemicals

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories
Acute health hazard No
Chronic Health Hazard No
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

U.S. EPA Label Information
EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

Special Comments
None
Additional information

Global Automotive Declarable Substance List (GADSL)
Not applicable

NFPA and HMIS Classifications

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMIS</td>
<td>Health hazards</td>
<td>Flammability</td>
<td>Physical Hazards</td>
<td>Personal protection</td>
</tr>
</tbody>
</table>

Key or legend to abbreviations and acronyms used in the safety data sheet

- NIOSH IDLH: Immediately Dangerous to Life or Health
- ACGIH: American Conference of Governmental Industrial Hygienists
- NDF: No data

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- TWA: Time-weighted average
- STEL: Short Term Exposure Limit
- Ceiling: Ceiling Limit Value
- X: Listed
- Vacated: These values have no official status. The only binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state regulations.

- SKN*: Skin designation
- SKN+: Skin sensitization
- RSP+: Respiratory sensitization
- **: Hazard Designation
- C: Carcinogen
- R: Reproductive toxicant
- M: Mutagen

Prepared By: Hach Product Compliance Department

Issue Date: 03-Oct-2017
Revision Date: 03-Oct-2017
Revision Note: None

Disclaimer

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

HACH COMPANY ©2017

End of Safety Data Sheet