



# SAFETY DATA SHEET

## 1. Identification

|                                                               |                                                                                                            |                       |
|---------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-----------------------|
| <b>Product identifier</b>                                     | <b>CONDUCTIVITY STANDARD 25,000 uS/cm</b>                                                                  |                       |
| <b>Other means of identification</b>                          |                                                                                                            |                       |
| <b>Product code</b>                                           | 2381                                                                                                       |                       |
| <b>Recommended use</b>                                        | professional, scientific and technical activities: other professional, scientific and technical activities |                       |
| <b>Recommended restrictions</b>                               | None known.                                                                                                |                       |
| <b>Manufacturer/Importer/Supplier/Distributor information</b> |                                                                                                            |                       |
| <b>Company name</b>                                           | GFS Chemicals, Inc.                                                                                        |                       |
| <b>Address</b>                                                | P.O. Box 245<br>Powell<br>OH<br>43065<br>US                                                                |                       |
| <b>Telephone</b>                                              | Phone                                                                                                      | 740-881-5501          |
|                                                               | Toll Free                                                                                                  | 800-858-9682          |
|                                                               | Fax                                                                                                        | 740-881-5989          |
| <b>Website</b>                                                | www.gfschemicals.com                                                                                       |                       |
| <b>E-mail</b>                                                 | service@gfschemicals.com                                                                                   |                       |
| <b>Emergency phone number</b>                                 | Emergency Assistance                                                                                       | Chemtrec 800-424-9300 |

## 2. Hazard(s) identification

|                         |                                                     |
|-------------------------|-----------------------------------------------------|
| <b>Physical hazards</b> | Not classified.                                     |
| <b>Health hazards</b>   | Not classified.                                     |
| <b>OSHA hazard(s)</b>   | Not classified.                                     |
|                         | No hazards resulting from the material as supplied. |

### Label elements

|                                                  |                 |
|--------------------------------------------------|-----------------|
| <b>Hazard symbol</b>                             | No symbol.      |
| <b>Signal word</b>                               | Not available.  |
| <b>Hazard statement</b>                          | Not available.  |
| <b>Precautionary statement</b>                   |                 |
| <b>Prevention</b>                                | Not available.  |
| <b>Response</b>                                  | Not available.  |
| <b>Storage</b>                                   | Not available.  |
| <b>Disposal</b>                                  | Not available.  |
| <b>Hazard(s) not otherwise classified (HNOC)</b> | Not classified. |

## 3. Composition/information on ingredients

### Mixtures

| <b>Hazardous components</b>     |                   |          |
|---------------------------------|-------------------|----------|
| <b>Chemical name</b>            | <b>CAS number</b> | <b>%</b> |
| POTASSIUM CHLORIDE              | 7447-40-7         | 1-5      |
| <b>Non-hazardous components</b> |                   |          |
| <b>Chemical name</b>            | <b>CAS number</b> | <b>%</b> |
| WATER                           | 7732-18-5         | 95-100   |

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

## 4. First-aid measures

|                     |                                                                                 |
|---------------------|---------------------------------------------------------------------------------|
| <b>Inhalation</b>   | Unlikely route of exposure as the product does not contain volatile substances. |
| <b>Skin contact</b> | Rinse with water.                                                               |

|                                                                               |                                                                              |
|-------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| <b>Eye contact</b>                                                            | Rinse with water. Get medical attention if irritation develops and persists. |
| <b>Ingestion</b>                                                              | Drink water as a precaution. Get medical attention if symptoms occur.        |
| <b>Most important symptoms/effects, acute and delayed</b>                     | Not available.                                                               |
| <b>Indication of immediate medical attention and special treatment needed</b> | Treat symptomatically.                                                       |

## 5. Fire-fighting measures

|                                                                      |                                                                                                                                                |
|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Suitable extinguishing media</b>                                  | Water. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ). Use extinguishing agent suitable for type of surrounding fire. |
| <b>Unsuitable extinguishing media</b>                                | Not available.                                                                                                                                 |
| <b>Specific hazards arising from the chemical</b>                    | Not applicable.                                                                                                                                |
| <b>Special protective equipment and precautions for firefighters</b> | Wear suitable protective equipment.                                                                                                            |

## 6. Accidental release measures

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Not available.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Methods and materials for containment and cleaning up</b>               | <p>This product is miscible in water. Stop the flow of material, if this is without risk.</p> <p>Large Spills: Dike the spilled material, where this is possible. Flush into sewer with plenty of water. Following product recovery, flush area with water.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.</p> <p>Never return spills in original containers for re-use. For waste disposal, see section 13 of the MSDS.</p> |
| <b>Environmental precautions</b>                                           | Prevent further leakage or spillage if safe to do so. Do not contaminate water.                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## 7. Handling and storage

|                                                                     |                                   |
|---------------------------------------------------------------------|-----------------------------------|
| <b>Precautions for safe handling</b>                                | Avoid release to the environment. |
| <b>Conditions for safe storage, including any incompatibilities</b> | Keep containers tightly closed.   |

## 8. Exposure controls/personal protection

|                                                                              |                                                                           |
|------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| <b>Occupational exposure limits</b>                                          | No exposure limits noted for ingredient(s).                               |
| <b>Biological limit values</b>                                               | No biological exposure limits noted for the ingredient(s).                |
| <b>Appropriate engineering controls</b>                                      | General ventilation normally adequate.                                    |
| <b>Individual protection measures, such as personal protective equipment</b> |                                                                           |
| <b>Eye/face protection</b>                                                   | Wear safety glasses with side shields (or goggles).                       |
| <b>Skin protection</b>                                                       |                                                                           |
| <b>Hand protection</b>                                                       | Not normally needed.                                                      |
| <b>Other</b>                                                                 | Normal work clothing (long sleeved shirts and long pants) is recommended. |
| <b>Respiratory protection</b>                                                | No personal respiratory protective equipment normally required.           |
| <b>Thermal hazards</b>                                                       | Not available.                                                            |
| <b>General hygiene considerations</b>                                        | Handle in accordance with good industrial hygiene and safety practice.    |

## 9. Physical and chemical properties

|                       |                   |
|-----------------------|-------------------|
| <b>Appearance</b>     | Clear.            |
| <b>Physical state</b> | Liquid.           |
| <b>Form</b>           | Aqueous solution. |

|                                                     |                                  |
|-----------------------------------------------------|----------------------------------|
| <b>Color</b>                                        | Colorless.                       |
| <b>Odor</b>                                         | Odorless.                        |
| <b>Odor threshold</b>                               | Not available.                   |
| <b>pH</b>                                           | 6 - 8                            |
| <b>Melting point/freezing point</b>                 | < 32 °F (< 0 °C)                 |
| <b>Initial boiling point and boiling range</b>      | > 212 °F (> 100 °C)              |
| <b>Flash point</b>                                  | Not available.                   |
| <b>Evaporation rate</b>                             | Not available.                   |
| <b>Flammability (solid, gas)</b>                    | Not applicable.                  |
| <b>Upper/lower flammability or explosive limits</b> |                                  |
| <b>Flammability limit - lower (%)</b>               | Not available.                   |
| <b>Flammability limit - upper (%)</b>               | Not available.                   |
| <b>Explosive limit - lower (%)</b>                  | Not available.                   |
| <b>Explosive limit - upper (%)</b>                  | Not available.                   |
| <b>Vapor density</b>                                | Not available.                   |
| <b>Relative density</b>                             | Not available.                   |
| <b>Solubility(ies)</b>                              | Miscible.                        |
| <b>Partition coefficient (n-octanol/water)</b>      | Not available.                   |
| <b>Auto-ignition temperature</b>                    | Not available.                   |
| <b>Decomposition temperature</b>                    | Not available.                   |
| <b>Viscosity</b>                                    | Not available.                   |
| <b>Other information</b>                            |                                  |
| <b>Density</b>                                      | 1.01 g/cm <sup>3</sup> estimated |
| <b>Percent volatile</b>                             | > 95 %                           |
| <b>Specific gravity</b>                             | 1.01 estimated                   |

## 10. Stability and reactivity

|                                           |                                                |
|-------------------------------------------|------------------------------------------------|
| <b>Reactivity</b>                         | Not available.                                 |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.    |
| <b>Possibility of hazardous reactions</b> | Hazardous polymerization does not occur.       |
| <b>Conditions to avoid</b>                | None under normal conditions.                  |
| <b>Incompatible materials</b>             | None known.                                    |
| <b>Hazardous decomposition products</b>   | No hazardous decomposition products are known. |

## 11. Toxicological information

### Information on likely routes of exposure

|                     |                                                                   |
|---------------------|-------------------------------------------------------------------|
| <b>Ingestion</b>    | Based on available data, the classification criteria are not met. |
| <b>Inhalation</b>   | Due to lack of data the classification is not possible.           |
| <b>Skin contact</b> | Due to lack of data the classification is not possible.           |
| <b>Eye contact</b>  | Due to lack of data the classification is not possible.           |

**Symptoms related to the physical, chemical and toxicological characteristics** Not available.

### Information on toxicological effects

#### Acute toxicity

| Product                                          | Species    | Test Results          |
|--------------------------------------------------|------------|-----------------------|
| CONDUCTIVITY STANDARD 25,000 uS/cm (CAS Mixture) |            |                       |
| <b>Acute</b>                                     |            |                       |
| <i>Oral</i>                                      |            |                       |
| LD50                                             | Guinea pig | 99999 mg/kg           |
|                                                  | Mouse      | 31917 mg/kg           |
|                                                  | Rat        | 99999 mg/kg           |
| <i>Other</i>                                     |            |                       |
| LD50                                             | Mouse      | 9750 mg/kg            |
|                                                  | Rat        | 2600 mg/kg, estimated |
| Components                                       | Species    | Test Results          |

POTASSIUM CHLORIDE (CAS 7447-40-7)

**Acute**

*Oral*

|      |            |            |
|------|------------|------------|
| LD50 | Guinea pig | 2500 mg/kg |
|      | Mouse      | 383 mg/kg  |
|      | Rat        | 2600 mg/kg |

*Other*

|      |       |           |
|------|-------|-----------|
| LD50 | Mouse | 117 mg/kg |
|      | Rat   | 39 mg/kg  |

\* Estimates for product may be based on additional component data not shown.

|                                                           |                                                                                 |
|-----------------------------------------------------------|---------------------------------------------------------------------------------|
| <b>Skin corrosion/irritation</b>                          | Due to lack of data the classification is not possible.                         |
| <b>Serious eye damage/eye irritation</b>                  | May irritate eyes. Due to lack of data the classification is not possible.      |
| <b>Respiratory sensitization</b>                          | Due to lack of data the classification is not possible.                         |
| <b>Skin sensitization</b>                                 | Due to lack of data the classification is not possible.                         |
| <b>Germ cell mutagenicity</b>                             | Due to lack of data the classification is not possible.                         |
| <b>Carcinogenicity</b>                                    | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. |
| <b>Reproductive toxicity</b>                              | Due to lack of data the classification is not possible.                         |
| <b>Specific target organ toxicity - single exposure</b>   | Due to lack of data the classification is not possible.                         |
| <b>Specific target organ toxicity - repeated exposure</b> | Due to lack of data the classification is not possible.                         |
| <b>Aspiration hazard</b>                                  | Due to lack of data the classification is not possible.                         |
| <b>Further information</b>                                | This product has no known adverse effect on human health.                       |

## 12. Ecological information

**Ecotoxicity** Contains a substance which causes risk of hazardous effects to the environment.

| Product                                          | Species | Test Results |
|--------------------------------------------------|---------|--------------|
| CONDUCTIVITY STANDARD 25,000 uS/cm (CAS Mixture) |         |              |
| Crustacea                                        | EC50    | Daphnia      |
|                                                  | LC50    | Daphnia      |
| Fish                                             | LC50    | Fish         |
| Components                                       | Species | Test Results |

POTASSIUM CHLORIDE (CAS 7447-40-7)

**Aquatic**

|           |      |                                         |                    |
|-----------|------|-----------------------------------------|--------------------|
| Crustacea | EC50 | Water flea (Daphnia magna)              | 83 mg/l, 48 hours  |
| Fish      | LC50 | Western mosquitofish (Gambusia affinis) | 435 mg/l, 96 hours |

\* Estimates for product may be based on additional component data not shown.

|                                      |                                                            |
|--------------------------------------|------------------------------------------------------------|
| <b>Persistence and degradability</b> | No data is available on the degradability of this product. |
| <b>Bioaccumulative potential</b>     | Not available.                                             |
| <b>Mobility in soil</b>              | Not available.                                             |

**Other adverse effects** Not available.

### 13. Disposal considerations

**Disposal instructions** Wash to drains with lots of water. Dispose in accordance with all applicable regulations.

**Local disposal regulations** Not available.

**Hazardous waste code** Not regulated.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal.

### 14. Transport information

#### DOT

Not regulated as a hazardous material by DOT.

#### IATA

Not regulated as a dangerous good.

#### IMDG

Not regulated as a dangerous good.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** No information available.

### 15. Regulatory information

**US federal regulations** CERCLA/SARA Hazardous Substances - Not applicable.

All components are on the U.S. EPA TSCA Inventory List.

#### **TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

#### **US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not on regulatory list.

#### **CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

#### **Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories** Immediate Hazard - No  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance** No

**SARA 311/312 Hazardous chemical** No

#### **Other federal regulations**

##### **Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

##### **Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.

##### **Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number**

Not listed.

##### **Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))**

Not regulated.

##### **DEA Exempt Chemical Mixtures Code Number**

Not regulated.

**Food and Drug Administration (FDA)** Not regulated.

**US state regulations** California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**US. Massachusetts RTK - Substance List**

Not regulated.

**US. New Jersey Worker and Community Right-to-Know Act**

Not regulated.

**US. Pennsylvania RTK - Hazardous Substances**

Not regulated.

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65****US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance**

Not listed.

**International Inventories**

| Country(s) or region        | Inventory name                                                         | On inventory (yes/no)* |
|-----------------------------|------------------------------------------------------------------------|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                     | Yes                    |
| Canada                      | Domestic Substances List (DSL)                                         | Yes                    |
| Canada                      | Non-Domestic Substances List (NDSL)                                    | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)             | Yes                    |
| Europe                      | European Inventory of Existing Commercial Chemical Substances (EINECS) | Yes                    |
| Europe                      | European List of Notified Chemical Substances (ELINCS)                 | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)               | Yes                    |
| Korea                       | Existing Chemicals List (ECL)                                          | Yes                    |
| New Zealand                 | New Zealand Inventory                                                  | Yes                    |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS)      | Yes                    |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                          | Yes                    |

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

**16. Other information, including date of preparation or last revision****Issue date** October-04-2013**Version #** 01**Further information** Not available.

**Disclaimer** The information in the sheet was written based on the best knowledge and experience currently available. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**Revision Information** Product and Company Identification: Product Codes  
Composition / Information on Ingredients: Ingredients  
Physical & Chemical Properties: Multiple Properties