SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

Product Identifier

Material Name: Sodium Chloride Irrigation (Hospira, Inc.)
Trade Name: Not established
Chemical Family: Mixture

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Intended Use: Pharmaceutical product

Details of the Supplier of the Safety Data Sheet

Hospira, A Pfizer Company
275 North Field Drive
Lake Forest, Illinois 60045
1-800-879-3477

Hospira UK Limited
Horizon
Honey Lane
Hurley
Maidenhead, SL6 6RJ
United Kingdom

Emergency telephone number:
CHEMTREC (24 hours): 1-800-424-9300
Contact E-Mail: pfizer-MSDS@pfizer.com

Emergency telephone number:
International CHEMTREC (24 hours): +1-703-527-3887

2. HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS - Classification Not classified as hazardous

Label Elements

Signal Word: Not Classified
Hazard Statements: Not classified in accordance with international standards for workplace safety.

Other Hazards

An Occupational Exposure Value has been established for one or more of the ingredients (see Section 8).

Note:

This document has been prepared in accordance with standards for workplace safety, which requires the inclusion of all known hazards of the product or its ingredients regardless of the potential risk. The precautionary statements and warning included may not apply in all cases. Your needs may vary depending upon the potential for exposure in your workplace.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous
### 3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>EU EINECS/ELINCS List</th>
<th>GHS Classification</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>SODIUM CHLORIDE</td>
<td>7647-14-5</td>
<td>231-598-3</td>
<td>Not Listed</td>
<td>0.45-0.9</td>
</tr>
<tr>
<td>SODIUM HYDROXIDE</td>
<td>1310-73-2</td>
<td>215-185-5</td>
<td>Skin Corr. 1A (H314)</td>
<td>**</td>
</tr>
<tr>
<td>HYDROCHLORIC ACID</td>
<td>7647-01-0</td>
<td>231-595-7</td>
<td>Skin Corr.1B (H314)</td>
<td>**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STOT SE 3 (H335)</td>
<td></td>
</tr>
<tr>
<td>Water for injection</td>
<td>7732-18-5</td>
<td>231-791-2</td>
<td>Not Listed</td>
<td>*</td>
</tr>
</tbody>
</table>

Additional Information: ** to adjust pH
Ingredient(s) indicated as hazardous have been assessed under standards for workplace safety. In accordance with 29 CFR 1910.1200, the exact percentage composition of this mixture has been withheld as a trade secret.

For the full text of the CLP/GHS abbreviations mentioned in this Section, see Section 16

### 4. FIRST AID MEASURES

**Description of First Aid Measures**
- **Eye Contact:** Due to the nature of this material first aid is not normally required.
- **Skin Contact:** Due to the nature of this material first aid is not normally required.
- **Ingestion:** Due to the nature of this material first aid is not normally required.
- **Inhalation:** Not an expected route of exposure.

**Most Important Symptoms and Effects, Both Acute and Delayed**
- **Symptoms and Effects of Exposure:** No data available
- **Medical Conditions Aggravated by Exposure:** None known

**Indication of the Immediate Medical Attention and Special Treatment Needed**
- **Notes to Physician:** None

### 5. FIRE FIGHTING MEASURES

**Extinguishing Media:** As for primary cause of fire.

**Special Hazards Arising from the Substance or Mixture**
- **Hazardous Combustion Products:** Not applicable
- **Fire / Explosion Hazards:** Not applicable

**Advice for Fire-Fighters**

Not applicable
6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures
Not applicable

Environmental Precautions
None

Methods and Material for Containment and Cleaning Up

Measures for Cleaning / Collecting:
Wipe up with a damp cloth and place in container for disposal.

Additional Consideration for Large Spills:
None

7. HANDLING AND STORAGE

Precautions for Safe Handling
No special handling requirements for normal use of this material.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions:
Store as directed by product packaging.

Incompatible Materials:
None

Specific end use(s):
No data available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters
Refer to available public information for specific member state Occupational Exposure Limits.

SODIUM CHLORIDE

Latvia OEL - TWA 5 mg/m³
Lithuania OEL - TWA 5 mg/m³

SODIUM HYDROXIDE

ACGIH Ceiling Threshold Limit: 2 mg/m³
Australia PEAK 2 mg/m³
Austria OEL - MAKs 2 mg/m³
Bulgaria OEL - TWA 2.0 mg/m³
Czech Republic OEL - TWA 1 mg/m³
Estonia OEL - TWA 1 mg/m³
France OEL - TWA 2 mg/m³
Greece OEL - TWA 2 mg/m³
Hungary OEL - TWA 2 mg/m³
Japan - OELs - Ceilings 2 mg/m³
Latvia OEL - TWA 0.5 mg/m³
OSHA - Final PELs - TWAs: 2 mg/m³
Poland OEL - TWA 0.5 mg/m³
Slovakia OEL - TWA 2 mg/m³
Slovenia OEL - TWA 2 mg/m³
Sweden OEL - TWAs 1 mg/m³
Switzerland OEL -TWAs 2 mg/m³

HYDROCHLORIC ACID

ACGIH Ceiling Threshold Limit: 2 ppm
### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Country</th>
<th>Standard</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Australia</strong></td>
<td>PEAK</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.5 mg/m³</td>
</tr>
<tr>
<td><strong>Austria</strong></td>
<td>OEL - MAKs</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 mg/m³</td>
</tr>
<tr>
<td><strong>Belgium</strong></td>
<td>OEL - TWA</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 mg/m³</td>
</tr>
<tr>
<td><strong>Bulgaria</strong></td>
<td>OEL - TWA</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8.0 mg/m³</td>
</tr>
<tr>
<td><strong>Cyprus</strong></td>
<td>OEL - TWA</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 mg/m³</td>
</tr>
<tr>
<td><strong>Czech Republic</strong></td>
<td>OEL - TWA</td>
<td>8 mg/m³</td>
</tr>
<tr>
<td><strong>Estonia</strong></td>
<td>OEL - TWA</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 mg/m³</td>
</tr>
<tr>
<td><strong>Germany</strong></td>
<td>TRGS 900 - TWAs</td>
<td>2 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 mg/m³</td>
</tr>
<tr>
<td><strong>Germany</strong></td>
<td>(DFG) - MAK</td>
<td>2 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.0 mg/m³</td>
</tr>
<tr>
<td><strong>Greece</strong></td>
<td>OEL - TWA</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7 mg/m³</td>
</tr>
<tr>
<td><strong>Hungary</strong></td>
<td>OEL - TWA</td>
<td>8 mg/m³</td>
</tr>
<tr>
<td><strong>Ireland</strong></td>
<td>OEL - TWAs</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 mg/m³</td>
</tr>
<tr>
<td><strong>Italy</strong></td>
<td>OEL - TWA</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 mg/m³</td>
</tr>
<tr>
<td><strong>Japan</strong></td>
<td>OELs - Ceilings</td>
<td>2 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.0 mg/m³</td>
</tr>
<tr>
<td><strong>Latvia</strong></td>
<td>OEL - TWA</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 mg/m³</td>
</tr>
<tr>
<td><strong>Lithuania</strong></td>
<td>OEL - TWA</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 mg/m³</td>
</tr>
<tr>
<td><strong>Luxembourg</strong></td>
<td>OEL - TWA</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 mg/m³</td>
</tr>
<tr>
<td><strong>Malta</strong></td>
<td>OEL - TWA</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 mg/m³</td>
</tr>
<tr>
<td><strong>Netherlands</strong></td>
<td>OEL - TWA</td>
<td>8 mg/m³</td>
</tr>
<tr>
<td><strong>Poland</strong></td>
<td>OEL - TWA</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td><strong>Portugal</strong></td>
<td>OEL - TWA</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 mg/m³</td>
</tr>
<tr>
<td><strong>Romania</strong></td>
<td>OEL - TWA</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 mg/m³</td>
</tr>
<tr>
<td><strong>Slovakia</strong></td>
<td>OEL - TWA</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8.0 mg/m³</td>
</tr>
<tr>
<td><strong>Slovenia</strong></td>
<td>OEL - TWA</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 mg/m³</td>
</tr>
<tr>
<td><strong>Spain</strong></td>
<td>OEL - TWA</td>
<td>5 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7.6 mg/m³</td>
</tr>
<tr>
<td><strong>Switzerland</strong></td>
<td>OEL - TWAs</td>
<td>2 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.0 mg/m³</td>
</tr>
<tr>
<td><strong>Vietnam</strong></td>
<td>OEL - TWAs</td>
<td>5 mg/m³</td>
</tr>
</tbody>
</table>

**Exposure Controls:**
- **Engineering Controls:** Engineering controls should be used as the primary means to control exposures.
- **Personal Protective Equipment:** Refer to applicable national standards and regulations in the selection and use of personal protective equipment (PPE).
8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- **Hands:** Not required for the normal use of this product.
- **Eyes:** Not required under normal conditions of use.
- **Skin:** Not required for the normal use of this product.
- **Respiratory protection:** None required under normal conditions of use.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State:</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor:</td>
<td>None</td>
</tr>
<tr>
<td>Molecular Formula:</td>
<td>Mixture</td>
</tr>
<tr>
<td>Solvent Solubility:</td>
<td>No data available</td>
</tr>
<tr>
<td>Water Solubility:</td>
<td>No data available</td>
</tr>
<tr>
<td>pH:</td>
<td>4.5-7.0</td>
</tr>
<tr>
<td>Melting/Freezing Point (°C):</td>
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</tr>
<tr>
<td>Boiling Point (°C):</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition Coefficient: (Method, pH, Endpoint, Value)</td>
<td>No data available</td>
</tr>
<tr>
<td>SODIUM HYDROXIDE</td>
<td>No data available</td>
</tr>
<tr>
<td>SODIUM CHLORIDE</td>
<td>No data available</td>
</tr>
<tr>
<td>Water for injection</td>
<td>No data available</td>
</tr>
<tr>
<td>HYDROCHLORIC ACID</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition Temperature (°C):</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation Rate (Gram/s):</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Pressure (kPa):</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor Density (g/ml):</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative Density:</td>
<td>No data available</td>
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<tr>
<td>Viscosity:</td>
<td>No data available</td>
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<tr>
<td>Flammability:</td>
<td></td>
</tr>
<tr>
<td>Autoignition Temperature (Solid) (°C):</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (Solids):</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash Point (Liquid) (°C):</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper Explosive Limits (Liquid) (% by Vol.):</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower Explosive Limits (Liquid) (% by Vol.):</td>
<td>No data available</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

- **Reactivity:** No data available
- **Chemical Stability:** Stable
- **Possibility of Hazardous Reactions**
  - **Oxidizing Properties:** No data available
  - **Conditions to Avoid:** None
  - **Incompatible Materials:** None
  - **Hazardous Decomposition Products:** No data available
11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

General Information: The information included in this section describes the potential hazards of the individual ingredients.

Short Term: Mild eye irritant in experimental animals (based on components)

Acute Toxicity: (Species, Route, End Point, Dose)

**SODIUM CHLORIDE**
- Rat Sub-tenon injection (eye) LC50/1hr > 42 g/m³
- Rat Oral LD 50 3g/kg
- Mouse Oral LD 50 4g/kg
- Rabbit Dermal LD 50 > 10g/kg

**HYDROCHLORIC ACID**
- Rat Oral LD 50 238-277 mg/kg

Acute Toxicity Comments: A greater than symbol (>) indicates that the toxicity endpoint being tested was not achievable at the highest dose used in the test.

Irritation / Sensitization: (Study Type, Species, Severity)

**SODIUM CHLORIDE**
- Skin Irritation Rabbit Mild
- Eye Irritation Rabbit Mild

Genetic Toxicity: (Study Type, Cell Type/Organism, Result)

**HYDROCHLORIC ACID**
- Bacterial Mutagenicity (Ames) Salmonella Negative
- In Vivo Micronucleus Rat Negative

Carcinogen Status: None of the components of this formulation are listed as a carcinogen by IARC, NTP or OSHA.

**HYDROCHLORIC ACID**
- IARC: Group 3 (Not Classifiable)

12. ECOLOGICAL INFORMATION

Environmental Overview: No harmful effects to aquatic organisms are expected.

Toxicity: No data available

Persistence and Degradability: No data available

Bio-accumulative Potential: No data available

Mobility in Soil: No data available
13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods:
Dispose of waste in accordance with all applicable laws and regulations. Member State specific and Community specific provisions must be considered. Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater.

14. TRANSPORT INFORMATION

The following refers to all modes of transportation unless specified below.

Not regulated for transport under USDOT, EUADR, IATA, or IMDG regulations.

15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

SODIUM CHLORIDE

CERCLA/SARA 313 Emission reporting: Not Listed
California Proposition 65: Not Listed
Inventory - United States TSCA - Sect. 8(b): Present
Australia (AICS): Present
EU EINECS/ELINCS List: 231-598-3

Water for injection
CERCLA/SARA 313 Emission reporting: Not Listed
California Proposition 65: Not Listed
Inventory - United States TSCA - Sect. 8(b): Present
Australia (AICS): Present
REACH - Annex IV - Exemptions from the obligations of Register: Present
EU EINECS/ELINCS List: 231-791-2

SODIUM HYDROXIDE

CERCLA/SARA 313 Emission reporting: Not Listed
CERCLA/SARA Hazardous Substances and their Reportable Quantities: 1000 lb
California Proposition 65: Not Listed
Inventory - United States TSCA - Sect. 8(b): Present
Australia (AICS): Present
Standard for the Uniform Scheduling for Drugs and Poisons: Schedule 5
15. REGULATORY INFORMATION

EU EINECS/ELINCS List  215-185-5

HYDROCHLORIC ACID

CERCLA/SARA 313 Emission reporting  1.0 %
CERCLA/SARA Hazardous Substances  5000 lb
and their Reportable Quantities:  2270 kg
CERCLA/SARA - Section 302 Extremely Hazardous  500 lb
TPQs
CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs
California Proposition 65 Not Listed
Inventory - United States TSCA - Sect. 8(b) Present
Australia (AICS): Present
Standard for the Uniform Scheduling
for Drugs and Poisons: Schedule 5
EU EINECS/ELINCS List  231-595-7

16. OTHER INFORMATION

Text of CLP/GHS Classification abbreviations mentioned in Section 3

Skin corrosion/irritation-Cat.1A; Skin corrosion/irritation-Cat.1B; H314 - Causes severe skin burns and eye damage
Specific target organ toxicity, single exposure; Respiratory tract irritation-Cat.3; H335 - May cause respiratory irritation

Data Sources:  Publicly available toxicity information.
Reasons for Revision:  Updated Section 3 - Composition / Information on Ingredients. Updated Section 11 - Toxicology Information.
Revision date:  25-Oct-2016
Prepared by:  Product Stewardship Hazard Communication

Pfizer Inc believes that the information contained in this Material Safety Data Sheet is accurate, and while it is provided in good faith, it is without warranty of any kind, expressed or implied. If data for a hazard are not included in this document there is no known information at this time.

End of Safety Data Sheet