SECTION 1: Product and company identification

<table>
<thead>
<tr>
<th>Item</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product name</td>
<td>Chelated Iron</td>
</tr>
<tr>
<td>Use of the substance/mixture</td>
<td>Fertilizer</td>
</tr>
<tr>
<td>Product code</td>
<td>0133</td>
</tr>
<tr>
<td>Company</td>
<td>Total Solutions</td>
</tr>
<tr>
<td>Address</td>
<td>P.O. Box 240014, Milwaukee, WI 53224 - USA</td>
</tr>
<tr>
<td>Phone</td>
<td>(414) 354-8417</td>
</tr>
<tr>
<td>Emergency number</td>
<td>Chemtec: (800) 424-9300</td>
</tr>
</tbody>
</table>

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)
Not classified

2.2. Label elements

GHS-US labeling
No labeling applicable

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

Full text of H-phrases: see section 16

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification (GHS-US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>iron (II) sulfate</td>
<td>(CAS No) 7720-78-7</td>
<td>5-10</td>
<td>Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319</td>
</tr>
</tbody>
</table>

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation: Remove the victim into fresh air.
First-aid measures after skin contact: Rinse skin with water/shower.
First-aid measures after eye contact: Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing.
First-aid measures after ingestion: Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries: Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/injuries after inhalation: None under normal use.
Symptoms/injuries after skin contact: Contact during a long period may cause light irritation.
Symptoms/injuries after eye contact: Direct contact with the eyes is likely irritating.
Symptoms/injuries after ingestion: Gastrointestinal complaints.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: All extinguishing media allowed.

5.2. Special hazards arising from the substance or mixture

Reactivity: Upon combustion: CO and CO2 are formed.

5.3. Advice for firefighters

Firefighting instructions: Exercise caution when fighting any chemical fire. Take account of environmentally hazardous firefighting water.
Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.
SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Isolate from fire, if possible, without unnecessary risk.

6.1.1. For non-emergency personnel


Emergency procedures: Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing. Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection.

Emergency procedures: Stop leak if safe to do so. Stop release. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment: Contain released substance, pump into suitable containers.

Methods for cleaning up: This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Comply with the legal requirements. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Comply with applicable regulations.

Storage conditions: Keep container closed when not in use.

Incompatible products: Oxidizing agent.

Storage area: Meet the legal requirements. Store in a cool area. Store in a well-ventilated place.

Special rules on packaging: Keep only in original container. meet the legal requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Personal protective equipment: Use appropriate personal protective equipment when risk assessment indicates this is necessary. Gloves. Protective clothing. Protective goggles. Safety glasses.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Appearance: muddy, dark brown liquid.

Odor: Pungent.

Odor threshold: No data available

pH: 2.2 - 3.2

Melting point: No data available

Freezing point: No data available

Boiling point: No data available

Flash point: > 200 °F Closed Cup

Relative evaporation rate (butyl acetate=1): No data available

Flammability (solid, gas): No data available

Explosion limits: No data available

Explosive properties: No data available
### Chelated Iron
#### Safety Data Sheet

<table>
<thead>
<tr>
<th><strong>Oxidizing properties</strong></th>
<th>No data available</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Relative vapor density at 20 °C</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Specific gravity / density</strong></td>
<td>1.2 g/ml</td>
</tr>
<tr>
<td><strong>Solubility</strong></td>
<td>Soluble in water.</td>
</tr>
<tr>
<td><strong>Log Pow</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Log Kow</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Viscosity</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Viscosity, kinematic</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Viscosity, dynamic</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>VOC content</strong></td>
<td>0 %</td>
</tr>
</tbody>
</table>

### SECTION 10: Stability and reactivity

**10.1. Reactivity**

Upon combustion: CO and CO2 are formed.

**10.2. Chemical stability**

No additional information available

**10.3. Possibility of hazardous reactions**

Refer to section 10.1 on Reactivity.

**10.4. Conditions to avoid**

No additional information available

**10.5. Incompatible materials**

No additional information available

**10.6. Hazardous decomposition products**

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### SECTION 11: Toxicological information

**11.1. Information on toxicological effects**

<table>
<thead>
<tr>
<th><strong>Acute toxicity</strong></th>
<th>Not classified</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Iron (II) sulfate (7720-78-7)</strong></td>
<td>500.000 mg/kg body weight</td>
</tr>
<tr>
<td><strong>ATE CLP (oral)</strong></td>
<td>500.000 mg/kg body weight</td>
</tr>
<tr>
<td><strong>Skin corrosion/irritation</strong></td>
<td>Not classified</td>
</tr>
<tr>
<td><strong>Serious eye damage/irritation</strong></td>
<td>Not classified</td>
</tr>
<tr>
<td><strong>Respiratory or skin sensitization</strong></td>
<td>Not classified</td>
</tr>
<tr>
<td><strong>Germ cell mutagenicity</strong></td>
<td>Not classified</td>
</tr>
<tr>
<td><strong>Carcinogenicity</strong></td>
<td>Not classified</td>
</tr>
<tr>
<td><strong>Reproductive toxicity</strong></td>
<td>Not classified</td>
</tr>
<tr>
<td><strong>Specific target organ toxicity (single exposure)</strong></td>
<td>Not classified</td>
</tr>
<tr>
<td><strong>Specific target organ toxicity (repeated exposure)</strong></td>
<td>Not classified</td>
</tr>
<tr>
<td><strong>Aspiration hazard</strong></td>
<td>Not classified</td>
</tr>
<tr>
<td><strong>Symptoms/injuries after inhalation</strong></td>
<td>None under normal use.</td>
</tr>
<tr>
<td><strong>Symptoms/injuries after skin contact</strong></td>
<td>Contact during a long period may cause light irritation.</td>
</tr>
<tr>
<td><strong>Symptoms/injuries after eye contact</strong></td>
<td>Direct contact with the eyes is likely irritating.</td>
</tr>
<tr>
<td><strong>Symptoms/injuries after ingestion</strong></td>
<td>Gastrointestinal complaints.</td>
</tr>
</tbody>
</table>

### SECTION 12: Ecological information

**12.1. Toxicity**

No additional information available
### 12.2. Persistence and degradability
No additional information available

### 12.3. Bioaccumulative potential
No additional information available

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods
Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations.

### SECTION 14: Transport information

**Department of Transportation (DOT)**

In accordance with DOT: Not regulated for transport

**Additional information**

Other information: No supplementary information available.

**ADR**
No additional information available

**Transport by sea**
No additional information available

**Air transport**
No additional information available

### SECTION 15: Regulatory information

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

This product or mixture does not contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

**iron (II) sulfate (7720-78-7)**

<table>
<thead>
<tr>
<th>Not listed on SARA Section 313 (Specific toxic chemical listings)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ (Reportable quantity, section 304 of EPA's List of Lists)</td>
</tr>
</tbody>
</table>

California Proposition 65 - This product does not contain substances known to the state of California to cause cancer and/or reproductive toxicity.

### SECTION 16: Other information

Training advice: Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of H-phrases:

<table>
<thead>
<tr>
<th>Acute Tox. 4 (Oral)</th>
<th>Acute toxicity (oral) Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Irrit. 2A</td>
<td>Serious eye damage/eye irritation Category 2A</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation Category 2</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
</tbody>
</table>

**NFPA health hazard**: 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.

**NFPA fire hazard**: 0 - Materials that will not burn.

**NFPA reactivity**: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.

Prepared by: Technical Department

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. No warranty is expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Our company assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material. Such vendees or users assume all risks associated with the use of this material.