SECTION 1: Identification

1.1. Identification
Product form: Substance
Substance name: Ferrous Ammonium Sulfate Hexahydrate
Chemical name: Iron (II) Ammonium Sulfate Hexahydrate
CAS-No.: 7783-85-9
Product code: LC14460
Formula: FeH8N2O8S2·6H2O

1.2. Recommended use and restrictions on use
Use of the substance/mixture: For laboratory and manufacturing use only.
Recommended use: Laboratory chemicals
Restrictions on use: Not for food, drug or household use

1.3. Supplier
LabChem Inc
Jackson's Pointe Commerce Park Building 1000, 1010 Jackson's Pointe Court
Zelienople, PA 16063 - USA
T 412-826-5230 - F 724-473-0647
info@labchem.com - www.labchem.com

1.4. Emergency telephone number
Emergency number: CHEMTREC: 1-800-424-9300 or 011-703-527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture
GHS-US classification
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A
Specific target organ toxicity (single exposure) Category 3
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation

2.2. GHS Label elements, including precautionary statements
GHS-US labeling
Hazard pictograms (GHS-US):

Signal word (GHS-US): Warning
Hazard statements (GHS-US):
H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation

Precautionary statements (GHS-US):
P261 - Avoid breathing dust
P264 - Wash exposed skin thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective gloves, eye protection
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312 - Call a POISON CENTER or doctor/physician if you feel unwell
P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362 - Take off contaminated clothing and wash it before reuse
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
Ferrous Ammonium Sulfate Hexahydrate
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.3. Other hazards which do not result in classification

Other hazards not contributing to the classification: None.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Substance type: Mono-constituent

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS-US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferrous Ammonium Sulfate Hexahydrate</td>
<td>(CAS-No.) 7783-85-9</td>
<td>100</td>
<td>Skin Irrit. 2, H315</td>
</tr>
<tr>
<td>(Main constituent)</td>
<td></td>
<td></td>
<td>Eye Irrit. 2A, H319</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>STOT SE 3, H335</td>
</tr>
</tbody>
</table>

Full text of hazard classes and H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

First-aid measures after skin contact: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation: May cause respiratory irritation.

Symptoms/effects after skin contact: Causes skin irritation.

Symptoms/effects after eye contact: Causes serious eye irritation.


Chronic symptoms: Enlargement/affection of the liver.

4.3. Immediate medical attention and special treatment, if necessary

Obtain medical assistance.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media


Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard: Not flammable.

Explosion hazard: Not applicable.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

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

6.1.1. For non-emergency personnel

Protective equipment: Gloves. Safety glasses.
Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders
Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.

6.2. Environmental precautions
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up : On land, sweep or shovel into suitable containers. Minimize generation of dust. Store away from other materials.

6.4. Reference to other sections
See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Avoid breathing dust. Use only outdoors or in a well-ventilated area.
Hygiene measures : Wash exposed skin thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, incompatible materials, Protect from moisture. Keep container tightly closed.
Incompatible materials : Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
<table>
<thead>
<tr>
<th>Ferrous Ammonium Sulfate Hexahydrate (7783-85-9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH ACGIH TWA (mg/m³)</td>
</tr>
<tr>
<td>NIOSH NIOSH REL (TWA) (mg/m³)</td>
</tr>
</tbody>
</table>

8.2. Appropriate engineering controls
Appropriate engineering controls : Emergency eye wash fountains should be available in the immediate vicinity of any potential exposure.

8.3. Individual protection measures/Personal protective equipment
Personal protective equipment:

Hand protection:
Wear protective gloves

Eye protection:
Chemical goggles or safety glasses

Skin and body protection:
Wear suitable protective clothing

Respiratory protection:
Gas mask
SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- **Physical state**: Solid
- **Appearance**: Crystalline powder.
- **Color**: Green Colorless
- **Odor**: Odorless characteristic
- **Odor threshold**: No data available
- **pH**: 3 - 5 (5% solution)
- **Melting point**: 100 °C
- **Freezing point**: No data available
- **Boiling point**: No data available
- **Flash point**: No data available
- **Relative evaporation rate (butyl acetate=1)**: No data available
- **Flammability (solid, gas)**: Non flammable.
- **Vapor pressure**: No data available
- **Relative vapor density at 20 °C**: No data available
- **Relative density**: 1.865
- **Specific gravity / density**: 1.865 g/cm³
- **Solubility**: Water: 269 g/l
- **Log Pow**: No data available
- **Auto-ignition temperature**: No data available
- **Decomposition temperature**: No data available
- **Viscosity, kinematic**: No data available
- **Viscosity, dynamic**: No data available
- **Explosion limits**: No data available
- **Explosive properties**: Not applicable.
- **Oxidizing properties**: No data available.

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Hygroscopic.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Do not allow contact with air. Moisture. Incompatible materials.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Gaseous ammonia. Sulfur compounds.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
## Ferrous Ammonium Sulfate Hexahydrate (7783-85-9)

### Likely routes of exposure
- Inhalation; Skin and eye contact

### Acute toxicity
- Not classified

### LD50 and ATE US
- **LD50 oral rat**: 3250 mg/kg
- **ATE US (oral)**: 3250 mg/kg body weight

#### Skin corrosion/irritation
- Causes skin irritation.
  - **pH**: 3 - 5

#### Serious eye damage/irritation
- Causes serious eye irritation.
  - **pH**: 3 - 5

#### Respiratory or skin sensitization
- Not classified

#### Germ cell mutagenicity
- Not classified
  - Based on available data, the classification criteria are not met

#### Carcinogenicity
- Not classified

#### Reproductive toxicity
- Not classified
  - Based on available data, the classification criteria are not met

#### Specific target organ toxicity – single exposure
- May cause respiratory irritation.

#### Specific target organ toxicity – repeated exposure
- Not classified

#### Aspiration hazard
- Not classified

#### Potential Adverse human health effects and symptoms
- Based on available data, the classification criteria are not met.

#### Symptoms/effects after inhalation
- May cause respiratory irritation.

#### Symptoms/effects after skin contact
- Causes skin irritation.

#### Symptoms/effects after eye contact
- Causes serious eye irritation.

#### Symptoms/effects after ingestion

#### Chronic symptoms
- Enlargement/affection of the liver.

## SECTION 12: Ecological information

### 12.1. Toxicity
- No additional information available

### 12.2. Persistence and degradability
- Ferrous Ammonium Sulfate Hexahydrate (7783-85-9)
  - **Persistence and degradability**: Not established.

### 12.3. Bioaccumulative potential
- Ferrous Ammonium Sulfate Hexahydrate (7783-85-9)
  - **Bioaccumulative potential**: Not established.

### 12.4. Mobility in soil
- No additional information available

### 12.5. Other adverse effects
- Other information: Avoid release to the environment.

## SECTION 13: Disposal considerations

### 13.1. Disposal methods
- Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations.
- Ecology - waste materials: Avoid release to the environment.

## SECTION 14: Transport information

### Department of Transportation (DOT)
- In accordance with DOT
- Not regulated
SECTION 15: Regulatory information

15.1. US Federal regulations

Ferrous Ammonium Sulfate Hexahydrate (7783-85-9)
Listed on the United States TSCA (Toxic Substances Control Act) inventory
RQ (Reportable quantity, section 304 of EPA's List of Lists) 1000 lb
SARA Section 311/312 Hazard Classes Immediate (acute) health hazard

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

15.2. International regulations

CANADA
Ferrous Ammonium Sulfate Hexahydrate (7783-85-9)
Not listed on the Canadian DSL (Domestic Substances List)

EU-Regulations
No additional information available

National regulations
Ferrous Ammonium Sulfate Hexahydrate (7783-85-9)
Not listed on the Canadian IDL (Ingredient Disclosure List)

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Revision date : 06/27/2017
Other information : None.

Full text of H-phrases: see section 16:

| H315          | Causes skin irritation     |
| H319          | Causes serious eye irritation |
| H335          | May cause respiratory irritation |

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.

NFPA fire hazard : 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.

Hazard Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

Flammability : 0 Minimal Hazard - Materials that will not burn

Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

Personal protection : B
B - Safety glasses, Gloves

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