



## SAFETY DATA SHEET

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

#### 1.1 Product identifiers

Product name: **IRON (II) SULPHATE HEPTAHYDRATE**

CAS-No.: **7782-63-0**

Product Number: **F77089**

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory chemicals, Manufacture of substances

#### 1.3 Details of the supplier of the safety data sheet

Company : Philip Harris Ltd., 2 Gregory Street, Hyde, Cheshire, SK14 4HR,

UNITED KINGDOM

Telephone: +44 (0)845 1200 506 Fax: +44 (0)161 367 2140

Email: enquiries@philipharris.co.uk

#### 1.4 Emergency telephone number

Emergency Phone #: **+44 (0)845 1200 506**

### 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

According to Regulation (EC) No1272/2008; Acute toxicity, Oral (Category 4)

According to European Directive 67/548/EEC as amended: Harmful if swallowed.

#### 2.2 Label elements

Pictogram



Signal word

Warning

Hazard statement(s): H302 Harmful if swallowed.

Hazard symbol(s): Xn Harmful

R-phrases: R22 Harmful if swallowed.

#### 2.3 Other hazards – no data available

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

**Ferrous sulphate heptahydrate** (Synonyms : Ferrous sulfateheptahydrate; Ironate)

Formula: **FeSO<sub>4</sub>·7H<sub>2</sub>O**

Molecular Weight: **278.01g/mol**

CAS-No.: **7782-63-0**

**4. FIRST AID MEASURES****4.1 Description of first aid measures**

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration.

**In case of skin contact:** Wash off with soap and plenty of water.

**In case of eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes.

**If swallowed:** Never give anything by mouth to an unconscious person. Rinse mouth with water.

**4.2 Most important symptoms and effects, both acute and delayed:** no data available

**4.3 Indication of immediate medical attention and special treatment needed:** no data available

**5. FIRE-FIGHTING MEASURES****5.1 Extinguishing media**

**Suitable extinguishing media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**5.2 Special hazards arising from the substance or mixture:** no data available

**5.3 Precautions for fire-fighters:** Wear self contained breathing apparatus for fire fighting if necessary.

**5.4 Further information:** The product itself does not burn.

**6. ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures:** Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

**6.2 Environmental precautions:** Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up:** Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections:** For disposal see section 13.

**7. HANDLING AND STORAGE**

**7.1 Precautions for safe handling:** Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

**7.2 Conditions for safe storage, including any incompatibilities:** Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Air sensitive. Store under inert gas. Hygroscopic

**7.3 Specific end uses:** no data available

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Components with workplace control parameters

Component	CAS No.	Value	Control Parameters	Update
Ferrous sulphate heptahydrate	7782-63-0	TWA	1mg/m <sup>3</sup>	1997-01-01
Ferrous sulphate heptahydrate	7782-63-0	STEL	2mg/m <sup>3</sup>	1997-01-01

UK. EH40 Occupational Exposure Limits.

### 8.2 Exposure controls

**Appropriate engineering controls:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

**Eye/face protection:** Safety glasses with side-shields conforming to EN166

**Skin protection:** The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Handle with gloves.

**Body Protection:** Choose body protection according to the amount and concentration of the dangerous substance at the work place.

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

- a) Appearance:           **Form:** Solid           **Colour:** no data available
- b) Odour:                           no data available
- c) Odour Threshold:           no data available
- d) pH:                               pH 3.0 - 4.0 at 50 g/l at 25 °C
- e) Melting/freezing point:   64 °C           Melting point/range: no data available
- f) Initial boiling point and boiling range: no data available
- g) Flash point:                   no data available
- h) Evaporation rate:           no data available
- i) Flammability (solid, gas):   no data available
- j) Upper/lower flammability or explosive limits: no data available
- k) Vapour pressure:           14.6 hPa at 25 °C
- l) Vapour density:               no data available
- m) Relative density:           1.898 g/mL at 25 °C
- n) Water solubility:           no data available
- o) Partition coefficient: n-octanol/water: no data available

- p) Autoignition temperature: no data available  
q) Decomposition temperature: no data available  
r) Viscosity: no data available  
s) Explosive properties: no data available  
t) Oxidizing properties: no data available

**9.2 Other safety information:** no data available

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity:** no data available

**10.2 Chemical stability:** Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions:** no data available

**10.4 Conditions to avoid:** no data available

**10.5 Incompatible materials:** Strong oxidizing agents

**10.6 Hazardous decomposition products:** Hazardous decomposition products formed under fire conditions. - Iron oxides, Sulphur oxides

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

**Acute toxicity:** LD50 Oral - mouse - 1,520 mg/kg

LD50 Intraperitoneal - mouse - 245 mg/kg

LD50 Intravenous - mouse - 51 mg/kg

**Skin corrosion/irritation:** no data available

**Serious eye damage/eye irritation:** no data available

**Respiratory or skin sensitization:** no data available

**Germ cell mutagenicity:** no data available

**Carcinogenicity:** IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**Reproductive toxicity:** no data available

**Specific target organ toxicity - single exposure:** no data available

**Specific target organ toxicity - repeated exposure:** no data available

**Aspiration hazard:** no data available

### Potential health effects

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** Harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

**Signs and Symptoms of Exposure:** no data available

**Additional Information:** RTECS: NO8510000

## 12. ECOLOGICAL INFORMATION

**12.1 Toxicity:** no data available

**12.2 Persistence and degradability:** no data available

**12.3 Bioaccumulative potential:** no data available

**12.4 Mobility in soil:** no data available

**12.5 Results of PBT and vPvB assessment:** no data available

**12.6 Other adverse effects:** no data available

## 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

**Product:** Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging:** Dispose of as unused product.

## 14. TRANSPORT INFORMATION

### 14.1 UN-Number

ADR/RID: - IMDG: - IATA: -

### 14.2 UN proper shipping name

ADR/RID: Not dangerous goods

IMDG: Not dangerous goods

IATA: Not dangerous goods

### 14.3 Transport hazard class(es)

ADR/RID: - IMDG: - IATA: -

### 14.4 Packaging group

ADR/RID: - IMDG: - IATA: -

### 14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

### 14.6 Special precautions for users

no data available

## 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:** no data available

**15.2 Chemical Safety Assessment:** no data available

## 16. OTHER INFORMATION

Acute Tox. Acute toxicity, H302 Harmful if swallowed. Xn Harmful. R22 Harmful if swallowed.