



## SAFETY DATA SHEET

Date of issue: 20/09/01

### 1. Identification of the substance/preparation and of the company/undertaking

#### *Identification of the product*

Catalogue No: 28384

ID No.: 1030600

Product name: **Iron(III) nitrate 9-hydrate GPR (ferric nitrate)**

#### *Manufacturer/supplier identification*

Company: VWR International Ltd  
Hunter Boulevard, Magna Park, Lutterworth, Leicestershire, England, LE17 4XN  
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### 2. Composition/information on ingredients

#### *Chemical characterization*

Inorganic salt

Product name: Iron(III) nitrate 9-hydrate

CAS number: 7782-61-8

EC-No.: 233-899-5

Molecular formula:  $\text{Fe}(\text{NO}_3)_3 \cdot 9\text{H}_2\text{O} = 404.00 \text{ g/mol}$

### 3. Hazards identification

Contact with combustible material may cause fire. Irritating to eyes and skin.

### 4. First aid measures

- Eye contact: Irrigate thoroughly with water for at least 10 minutes. If discomfort persists, obtain medical attention.
- Inhalation: Remove from exposure, rest and keep warm. In severe cases obtain medical attention.
- Skin contact: Wash off thoroughly with soap and water. Remove contaminated clothing and wash before re-use. In severe cases, OBTAIN MEDICAL ATTENTION.
- Ingestion: Wash out mouth thoroughly with water and give plenty of water to drink. OBTAIN MEDICAL ATTENTION.

### 5. Fire-fighting measures

#### *Special risks:*

May ignite combustible material.  
May evolve toxic fumes in fire.

#### *Suitable extinguishing media:*

Water spray

## 6. Accidental release measures

Wear appropriate protective clothing.

Mix with sand, transfer carefully to container and arrange removal by disposal company. Wash site of spillage thoroughly with water and detergent.

For large spillages liquids should be contained with sand or earth and both liquids and solids transferred to salvage containers. Any residues should be treated as for small spillages.

## 7. Handling and storage

### *Handling:*

Wash hands and face thoroughly after working with material. Contaminated clothing should be removed and washed before re-use.

### *Storage:*

Store at room temperature (15 to 25°C recommended). Keep well closed and protected from direct sunlight and moisture. Store away from combustible materials.

## 8. Exposure controls/personal protection

### *UK Exposure Limits:*

WEL - Iron salts (as Fe):

Long term: 1 mg/m<sup>3</sup> Short term: 2 mg/m<sup>3</sup>

### *Personal protective equipment:*

As appropriate to the situation and the quantity handled.

- Respirator: Dust respirator
- Ventilation: Extraction hood
- Gloves: Rubber or plastic
- Eye Protection: Goggles or face-shield
- Other Precautions: Plastic apron, sleeves, boots - if handling large quantities

## 9. Physical and chemical properties

### *General information:*

Form:	solid
Colour:	light violet
Odour:	of nitric acid

### *Health, safety and environmental information:*

Melting temperature	47°C
Boiling temperature	No data
Solubility in water	Very soluble
pH value	1.3 (100g/l H <sub>2</sub> O)
Flash point	Not applicable
Explosion limits: lower:	Not applicable
Auto-ignition temperature	Not applicable

## 10. Stability and reactivity

sensitive to moisture.

Substances to be avoided

organic combustible substances, reducing agents.

The possibility of reaction with other substances cannot be excluded.

## 11. Toxicological information

- After inhalation: May irritate.
- After skin contact: Severe irritation.
- After eye contact: Severe irritation.
- After ingestion: May irritate.

### *Further data*

LD50 3250 mg/kg oral, rat.

The following applies to nitrites/nitrates in general: methaemoglobinaemia after the uptake of large quantities.

## 12. Ecological information

The following applies to dissolved iron compounds in general: fish: toxic from 0.9 mg/l up at pH 6.5-7.5; lethal from 1 mg/l up at pH 5.5-6.7; 50 mg/l iron upper limit for fish life. When iron ions flocculate in an alkaline medium, mechanical damage occurs in aquatic organisms.

The following applies to nitrates in general: may contribute to the eutrophication of water supplies. Hazard for drinking water.

Fish: LC50 > 500 mg/l.

Do not allow to enter drinking water supplies, waste water, or soil!

## 13. Disposal considerations

Chemical residues are generally classified as hazardous or special waste, and as such are covered by regulations which vary according to location. Contact your local waste disposal authority for advice, or pass to a chemical disposal company. Rinse out empty containers thoroughly before returning for recycling.

## 14. Transport information

UN-No.: 1466

Class: 5.1

Packaging group: III

Proper shipping name: FERRIC NITRATE

## 15. Regulatory information

### *Labelling according to EC directives*

Symbol(s): O Xi Oxidising. Irritant.

R-phrases: R8-36/38

Contact with combustible material may cause fire. Irritating to eyes and skin.

S-phrases: S26

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

EC-No.: 233-899-5

### ***Local Regulations***

Within the UK, the use of this material must be assessed under the Control of Substances Hazardous to Health (COSHH) regulations.

### **16. Other information**

Revision.

Supercedes issue of 13/03/95

Changes in Section : 6,11

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