

Material Safety Data Sheet

DS7782618

1. Identification

Identification of the product

Catalogue No: IR055

Product name: Iron(III) nitrate nonahydrate

Synonyms Ferric nitrate; Iron trinitrate; Iron nitrate

Manufacturer/supplier identification

Company: Scientific & Chemical Supplies Limited

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2. Composition/information on ingredients

Chemical classification

Inorganic salt

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 skin thoroughly with 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

As appropriate to the situation and the quantity handled.

Respirator: Dust respiratorVentilation: Extraction hoodGloves: Rubber or plastic

Eye Protection: Goggles or face-shield

• Other Precautions: Plastic apron, sleeves, boots - if handling large quantities

9. Physical and chemical properties

Physical State: Solid

Appearance: Light violet/purple Odour: Of nitric acid pH: 1.3 (100g/l H₂O).

Freezing/Melting Point: 47°C

Solubility: Very soluble. Molecular Formula: $Fe(NO_3)_3.9H_2O$

Molecular Weight: 404.00

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 eve 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 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 IMDG class: 5.1 IMO: 5.1/1466 Packaging group: III IATA: 1466 Packaging group: III

Correct technical name: FERRIC NITRATE

ADR/RID: 5.1,22'(c)

15. Regulatory information

Labelling according to EC directives

Symbol: 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.

UK Exposure Limits: WEL - Iron salts (as Fe):

Long term: 1 mg/m³ Short term: 2 mg/m³

16. Other information

Date of issue: 21 November 2006

Important Statement

The information above is believed to be accurate and represents the best information currently available from multiple crosschecked sources.

However, we make no warranty express or implied, with respect to such information, and we assume no liability resulting from its use.

Users should make their own investigations to determine the suitability of the information for their particular purposes.

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