




**1 Identification of the substance/mixture and of the company/undertaking**

- **Product identifier**
- **Trade name:** FERRIC NITRATE NONAHYDRATE
- **CAS Number:**  
7782-61-8
- **EC number:**  
233-899-5
- **Registration number** 01-2119978293-27-0002
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the preparation**  
Intermediate  
Industrial uses
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
JINWANG EUROPE  
ZI Jean Jaurès  
218, Avenue Marie Curie  
07800 La Voulte Sur Rhone  
France
- **Further information obtainable from:** [emilie.bertin@jinwang.eu](mailto:emilie.bertin@jinwang.eu)
- **Emergency telephone number:**  
England and Wales: +44 845 4647  
Germany : +49 30 192 40  
Austria : +43 1 406 43 43  
Belgium : +32 70 245 245  
Danemark : +45 82 12 12 12  
Spain : +34 156 20420  
France : +33 140 054 848  
Italy : +39 02 6610 1029  
Norway : +47 22 59 13 00  
Netherlands : +31 30 274 88 88  
Sweden : +46 8 33 12 31

**2 Hazards identification**

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**  
 **GHS05 corrosion**  
  
Skin Corr. 1B H314 Causes severe skin burns and eye damage.  
Eye Dam. 1 H318 Causes serious eye damage.
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**  
 **C; Corrosive**  
**R35:** Causes severe burns.
-  **Xi; Irritant**  
**R41:** Risk of serious damage to eyes.
- **Information concerning particular hazards for human and environment:** Not applicable.
- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The substance is classified and labelled according to the CLP regulation.

**Trade name: FERRIC NITRATE NONAHYDRATE**

(Contd. of page 1)

· **Hazard pictograms**



GHS05

· **Signal word** *Danger*

· **Hazard-determining components of labelling:**

*Ferric Nitrate Nonahydrate*

· **Hazard statements**

*H314 Causes severe skin burns and eye damage.*

· **Precautionary statements**

*P260 Do not breathe dust/fume/gas/mist/vapours/spray.*

*P280 Wear protective gloves/protective clothing/eye protection/face protection.*

*P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.*

*P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*

*P310 Immediately call a POISON CENTER or doctor/physician.*

*P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.*

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** *Not applicable.*

· **vPvB:** *Not applicable.*

### 3 Composition/information on ingredients

· **Chemical characterization: Substances**

· **CAS No. Description**

*7782-61-8 Ferric Nitrate Nonahydrate*

· **Identification number(s)**

· **EC number:** *233-899-5*

### 4 First aid measures

· **Description of first aid measures**

· **After inhalation:**

*Supply fresh air; consult doctor in case of complaints.*

*In case of unconsciousness place patient stably in side position for transportation.*

· **After skin contact:**

*If skin irritation continues, consult a doctor.*

*Immediately wash with water and soap and rinse thoroughly.*

· **After eye contact:**

*Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.*

· **After swallowing:**

*Do not induce vomiting; call for medical help immediately.*

*If symptoms persist consult doctor.*

· **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed** *No further relevant information available.*

· **Indication of any immediate medical attention and special treatment needed**

*No further relevant information available.*

**Trade name: FERRIC NITRATE NONAHYDRATE**

(Contd. of page 2)

## 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
Use fire extinguishing methods suitable to surrounding conditions.  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **Special hazards arising from the substance or mixture**  
Nitrogen oxides (NO<sub>x</sub>)  
Carbon monoxide (CO)
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **Environmental precautions:** Do not allow product to reach sewage system or any water course.
- **Methods and material for containment and cleaning up:**  
Send for recovery or disposal in suitable receptacles.  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Open and handle receptacle with care.  
Keep away from heat and direct sunlight.
- **Information about fire - and explosion protection:** Protect from heat.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Store away from flammable substances.
- **Further information about storage conditions:**  
Store receptacle in a well ventilated area.  
Keep container tightly sealed.  
Protect from heat and direct sunlight.
- **Recommended storage temperature:** Storage temperature : Room temperature
- **Specific end use(s)** No further relevant information available.

## \* 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **DNELs**  
Worker / long term / local effects / inhalation: 12 mg/m<sup>3</sup>  
Worker / long term / systemic effects / skin contact: 17 mg / kg bw / day  
General Population / long term / local effects / inhalation: 3 mg/m<sup>3</sup>  
General Population / long term / systemic effects / skin contact: 8.6 mg / kg bw / day

(Contd. on page 4)

**Trade name: FERRIC NITRATE NONAHYDRATE**

· **PNECs**

*Aquatic compartment: 0.024 mg / L*

*Marine compartment: 0.0024 mg / L*

*Water / sediment: 0.2 mg / kg*

*Marine / sediment: 0.02 mg / kg*

*Earth: 0.026 mg / kg*

*STEP / microorganisms: 500 mg / L*

· **Additional information:** *The lists valid during the making were used as basis.*

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

*The usual precautionary measures are to be adhered to when handling chemicals.*

*Keep away from foodstuffs, beverages and feed.*

*Immediately remove all soiled and contaminated clothing*

*Wash hands before breaks and at the end of work.*

*Avoid contact with the eyes and skin.*

· **Respiratory protection:**

*In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.*



*Suitable respiratory protective device recommended.*

· **Protection of hands:**



*Protective gloves*

*The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.*

*Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.*

*Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation*

· **Material of gloves**

*The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.*

· **Penetration time of glove material**

*The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.*

· **Eye protection:**



*Tightly sealed goggles*

· **Body protection:**

*Protective work clothing*

*Use protective suit.*

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

**Form:** Crystalline

(Contd. on page 5)

**Trade name: FERRIC NITRATE NONAHYDRATE**

<b>Colour:</b>	Violet
<b>· Odour:</b>	Odourless
<b>· pH-value:</b>	Not applicable.
<b>· Change in condition</b>	
<b>Melting point/Melting range:</b>	47.2 °C
<b>Boiling point/Boiling range:</b>	Undetermined.
<b>· Flash point:</b>	Not applicable.
<b>· Flammability (solid, gaseous):</b>	Contact with combustible material may cause fire.
<b>· Ignition temperature:</b>	
<b>Decomposition temperature:</b>	Not determined.
<b>· Self-igniting:</b>	Not determined.
<b>· Danger of explosion:</b>	Not determined.
<b>· Density at 20 °C:</b>	1.68 g/cm <sup>3</sup>
<b>· Solubility in / Miscibility with water at 20 °C:</b>	835 g/l
<b>· Solvent content:</b>	
<b>Organic solvents:</b>	0.0 %
<b>VOC (EC)</b>	0.00 %
<b>· Solids content:</b>	100.0 %
<b>· Other information</b>	No further relevant information available.

## 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid**
  - Heat
  - Moist air
  - Light
- **Incompatible materials:**
  - Reducing agents
  - Combustible substances
- **Hazardous decomposition products:**
  - Carbon monoxide and carbon dioxide
  - Nitrogen oxides (NO<sub>x</sub>)

## 11 Toxicological information

- **Information on toxicological effects**
  - **Acute toxicity:**
  - **LD/LC50 values relevant for classification:**
- |                                      |      |                  |
|--------------------------------------|------|------------------|
| 7782-61-8 Nitrate de Fer Nonahydrate |      |                  |
| Oral                                 | LD50 | 3250 mg/kg (rat) |
- **Primary irritant effect:**
  - **on the skin:** Irritant to skin and mucous membranes.
  - **on the eye:** Irritating effect.

(Contd. on page 6)

**Trade name: FERRIC NITRATE NONAHYDRATE**

- **Sensitization:** No sensitizing effects known.

## 12 Ecological information


- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Other information:**
  - Chronic / Fish / NOEL = 10 mg / L  
(*Xiphophorus helleri*)
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** Very soluble: Sub ultimate Water
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Discharge into drains or the environment prohibited. Waste disposal must be in accordance with the Regulations and Orders Prefectural into force. Although empty contaminated packaging, deliver to an approved disposal.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

## 14 Transport information

- |   |                                |
|---|--------------------------------|
| · <b>UN-Number</b>  |                                |
| · <b>ADR, IMDG, IATA</b>  | UN1466                         |
| · <b>UN proper shipping name</b>  |                                |
| · <b>ADR</b>  | 1466 FERRIC NITRATE            |
| · <b>IMDG, IATA</b>   | FERRIC NITRATE                 |
| · <b>Transport hazard class(es)</b>   |                                |
| · <b>ADR, IMDG, IATA</b>  |                                |
|  |                                |
| · <b>Class</b>  | 5.1 Oxidising substances.      |
| · <b>Label</b>  | 5.1                            |
| · <b>Packing group</b>  |                                |
| · <b>ADR, IMDG, IATA</b>  | III                            |
| · <b>Environmental hazards:</b>   |                                |
| · <b>Marine pollutant:</b>  | No                             |
| · <b>Special precautions for user</b>   | Warning: Oxidising substances. |

(Contd. on page 7)

**Trade name: FERRIC NITRATE NONAHYDRATE**

- |  |                                  |
|--|----------------------------------|
| · <b>Danger code (Kemler):</b>   | 50                               |
| · <b>EMS Number:</b>   | F-A,S-Q                          |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable.                  |
| · <b>Transport/Additional information:</b>                                       |                                  |
| · <b>ADR</b>   |                                  |
| · <b>Limited quantities (LQ)</b>   | 5 kg                             |
| · <b>Transport category</b>  | 3                                |
| · <b>Tunnel restriction code</b>   | E                                |
| · <b>UN "Model Regulation":</b>  | UN1466, FERRIC NITRATE, 5.1, III |

### **15 Regulatory information**

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations:**
- **Waterhazard class:** Generally not hazardous for water.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### **16 Other information**

*This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

· **Abbreviations and acronyms:**

*RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*

*ICAO: International Civil Aviation Organization*

*ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*

*IMDG: International Maritime Code for Dangerous Goods*

*IATA: International Air Transport Association*

*GHS: Globally Harmonized System of Classification and Labelling of Chemicals*

*EINECS: European Inventory of Existing Commercial Chemical Substances*

*CAS: Chemical Abstracts Service (division of the American Chemical Society)*

*VOC: Volatile Organic Compounds (USA, EU)*

*DNEL: Derived No-Effect Level (REACH)*

*PNEC: Predicted No-Effect Concentration (REACH)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

- **\* Data compared to the previous version altered.**