

MATERIAL SAFETY DATA SHEET  
 Iron(III) nitrate nonahydrate, reagent ACS

**Section 1 - Chemical Product and Company Identification**

<b>MSDS Name:</b>	Iron(III) nitrate nonahydrate, reagent ACS
<b>Catalog Numbers:</b>	42371-0000, 42371-0030, 42371-0050, 42371-5000
<b>Synonyms:</b>	Iron (III) nitrate nonahydrate, Nitric acid iron (3+) salt nonahydrate.
<b>Company Identification:</b>	Acros Organics BVBA Janssen Pharmaceuticaaan 3a 2440 Geel, Belgium
<b>Company Identification: (USA)</b>	Acros Organics One Reagent Lane Fair Lawn, NJ 07410
<b>For information in the US, call:</b>	800-ACROS-01
<b>For information in Europe, call:</b>	+32 14 57 52 11
<b>Emergency Number, Europe:</b>	+32 14 57 52 99
<b>Emergency Number US:</b>	201-796-7100
<b>CHEMTREC Phone Number, US:</b>	800-424-9300
<b>CHEMTREC Phone Number, Europe:</b>	703-527-3887

**Section 2 - Composition, Information on Ingredients**

CAS#	Chemical Name:	%	EINECS#
7782-61-8	Iron(III) nitrate nonahydrate, reagent ACS		unlisted

**Hazard Symbols:** XI O

**Risk Phrases:** 36/37/38 8

**Section 3 - Hazards Identification**
**EMERGENCY OVERVIEW**

*Irritating to eyes, respiratory system and skin. Contact with combustible material may cause fire. Hygroscopic (absorbs moisture from the air).*

**Potential Health Effects**
**Eye:** Causes eye irritation.

**Skin:** Causes skin irritation.

**Ingestion:** May cause central nervous system depression, kidney damage, and liver damage. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause cardiac disturbances. The toxicological properties of this substance have not been fully investigated.

**Inhalation:** Causes respiratory tract irritation.

**Chronic:** May cause methemoglobinemia, which is characterized by chocolate-brown colored blood,

headache, weakness, dizziness, breath shortness, cyanosis (bluish skin due to deficient oxygenation of blood), rapid heart rate, unconsciousness and possible death.

#### Section 4 - First Aid Measures

- Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
- Skin:** Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
- Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.
- Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

#### Notes to Physician:

#### Section 5 - Fire Fighting Measures

- General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Use water spray to keep fire-exposed containers cool. Oxidizer. Greatly increases the burning rate of combustible materials.
- Extinguishing Media:** Use water only! Do NOT use carbon dioxide or dry chemical.

#### Section 6 - Accidental Release Measures

- General Information:** Use proper personal protective equipment as indicated in Section 8.
- Spills/Leaks:** Wear a self contained breathing apparatus and appropriate personal protection. (See Exposure Controls, Personal Protection section). Sweep up, then place into a suitable container for disposal.

#### Section 7 - Handling and Storage

- Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Do not get on skin or in eyes. Do not ingest or inhale.
- Storage:** Do not store near combustible materials. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

#### Section 8 - Exposure Controls, Personal Protection

##### Engineering Controls:

Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

##### Exposure Limits

CAS# 7782-61-8:

Belgium - TWA: ( iron salts (soluble)): 1 mg/m<sup>3</sup> VLE (as Fe)

Malaysia: ( iron salts (soluble)): 1 mg/m<sup>3</sup> TWA (as Fe)

Netherlands: ( iron salts (soluble)): 1 mg/m<sup>3</sup> MAC (as Fe)

Spain: ( iron salts (soluble)): 1 mg/m<sup>3</sup> VLA-ED (as Fe)

##### Personal Protective Equipment

- Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
- Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### Section 9 - Physical and Chemical Properties

**Physical State:** Crystalline powder

**Color:** light purple - grey

**Odor:** Not available

**pH:** Not available

**Vapor Pressure:** Negligible.

**Viscosity:** Not available

**Boiling Point:** Not available

**Freezing/Melting Point:** 0 deg C ( 32.00°F)

**Autoignition Temperature:** Not available

**Flash Point:** Not available

**Explosion Limits: Lower:** Not available

**Explosion Limits: Upper:** Not available

**Decomposition Temperature:** Not available

**Solubility in water:** soluble in water

**Specific Gravity/Density:**

**Molecular Formula:** Fe(NO3)3.9H2O

**Molecular Weight:** 404.00

### Section 10 - Stability and Reactivity

**Chemical Stability:** Stable. However, may decompose if heated.

**Conditions to Avoid:** Incompatible materials, light, combustible materials, temperatures above 50°C (122°F).

**Incompatibilities with Other Materials** Strong oxidizing agents, reducing agents.

**Hazardous Decomposition Products** Nitrogen oxides.

**Hazardous Polymerization** Has not been reported.

### Section 11 - Toxicological Information

**RTECS#:** CAS# 7782-61-8: NO7175000

**LD50/LC50:** RTECS:  
**CAS# 7782-61-8:** Oral, rat: LD50 = 3250 mg/kg;

**Carcinogenicity:** Iron(III) nitrate nonahydrate, reagent ACS - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.

**Other:** See actual entry in RTECS for complete information.

### Section 12 - Ecological Information

**Other:** No information available.

### Section 13 - Disposal Considerations

Dispose of in a manner consistent with federal, state, and local regulations.

### Section 14 - Transport Information

	<b>IATA</b>	<b>IMO</b>	<b>RID/ADR</b>
<b>Shipping Name:</b>	FERRIC NITRATE	FERRIC NITRATE	FERRIC NITRATE
<b>Hazard Class:</b>	5.1	5.1	5.1
<b>UN Number:</b>	1466	1466	1466
<b>Packing Group:</b>	III	III	III

**Section 15 - Regulatory Information**

**European/International Regulations**

European Labeling in Accordance with EC Directives

Hazard Symbols: XI O

Risk Phrases:

- R 36/37/38 Irritating to eyes, respiratory system and skin.
- R 8 Contact with combustible material may cause fire.

Safety Phrases:

- S 17 Keep away from combustible material.
- S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 7782-61-8: 1

Canada

**US Federal**

TSCA

CAS# 7782-61-8 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form in on the Inventory (40CFR720.3(u)(2)).

**Section 16 - Other Information**

**MSDS Creation Date:** 7/16/1996

**Revision #0 Date** Original.

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other 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. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.*

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