

# **SAFETY DATA SHEET**

## 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : Iron(III) nitrate nonahydrate

Product Number : F1300 Brand : ACP

CAS-No. : 7782-61-8

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

Identified uses : For Laboratory Use Only

1.3 Details of the supplier of the safety data sheet

Company : ACP Chemicals Inc

4601, boul. Des Grandes Prairies

St Leonard, Qc, H1R 1A5

**CANADA** 

Telephone : +1 5143270323 Fax : +1 5143278474

1.4 Emergency telephone number

Emergency Phone # : +1-613-996-6666 (CANUTEC)

### 2. HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

GHS Classification in accordance with Hazardous Products Regulations (HPR) (SOR/2015-17)

Skin corrosion (Category 1B), H314 Serious eye damage (Category 1), H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

### 2.2 GHS Label elements, including precautionary statements

Pictogram

Signal word Danger

Hazard statement(s)

H314 Causes severe skin burns and eye damage.

Precautionary statement(s)

P260 Do not breathe dust or mist.

P264 Wash skin thoroughly after handling.

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

protection.

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

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for

breathing. Immediately call a POISON CENTER/doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. Immediately

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call a POISON CENTER/doctor.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Synonyms : Ferric nitrate nonahydrate

Formula : FeN<sub>3</sub>O<sub>9</sub> · 9H<sub>2</sub>O Molecular weight : 404.00 g/mol CAS-No. : 7782-61-8 EC-No. : 233-899-5

#### Hazardous components

Component	Classification	Concentration*			
Ferric nitrate nonahydrate					
	Skin Corr. 1B; Eye Dam. 1; H314	90 - 100 %			
* Weight percent					

For the full text of the H-Statements mentioned in this Section, see Section 16.

## 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. Consult a physician.

### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

# In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

# 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

## 4.3 Indication of any immediate medical attention and special treatment needed

No data available

### **5. FIREFIGHTING MEASURES**

# 5.1 Extinguishing media

## Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

## 5.2 Special hazards arising from the substance or mixture

No data available

## 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

No data available

## **6. ACCIDENTAL RELEASE MEASURES**

## 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

## 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. Sweep up and shovel. 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.

For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Hygroscopic. Air sensitive. Store under inert gas.

### 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 Control parameters

## Components with workplace control parameters

Components	CAS-No.	Value	Control parameters	Basis		
Ferric nitrate nonahydrate	7782-61-8	TWA	1.000000 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)		
Remarks	Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required					
		TWAEV	1.000000 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants		
		TWAEV	1.000000 mg/m3	Canada. Ontario OELs		
		TWA	1.000000 mg/m3	Canada. British Columbia OEL		
		STEL	2.000000 mg/m3	Canada. British Columbia OEL		

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	TWA	1 mg/m3	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)			
Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required						
	TWAEV	1 mg/m3	Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants			
	TWA	1 mg/m3	Canada. British Columbia OEL			
	STEL	2 mg/m3	Canada. British Columbia OEL			
	SILL	2 mg/m3	Canada. British Columbia OLL			
	TWA	1.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)			
	TWA	1 mg/m3	USA. ACGIH Threshold Limit Values (TLV)			

## 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

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

#### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the

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sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## Control of environmental exposure

Do not let product enter drains.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on basic physical and chemical properties

a) Appearance Form: solid

b) Odour
 c) Odour Threshold
 d) pH
 No data available
 1.5 at 20 °C (68 °F)

e) Melting point/freezing

point

Melting point/range: 47 °C (117 °F) - lit.

f) Initial boiling point and

boiling range

No data available

g) Flash point Not applicable
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 No data availablel) Vapour density No data available

m) Relative density 1.68 g/cm3 at 20 °C (68 °F)

n) Water solubility soluble

o) Partition coefficient: n-

octanol/water

No data available

p) Auto-ignition No data available

temperature

> 100 °C (> 212 °F) -

q) Decomposition temperature

r) Viscosity No data availables) Explosive properties No data available

Oxidizing properties The substance or mixture is not classified as oxidizing.

# 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

Organic materials, Powdered metals

## 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Nitrogen oxides (NOx), Sulphur oxides, Borane/boron oxides. Iron oxides

Other decomposition products - No data available

In the event of fire: see section 5

#### 11. TOXICOLOGICAL INFORMATION

## 11.1 Information on toxicological effects

## **Acute toxicity**

LD50 Oral - Rat - 3,250 mg/kg

Dermal: No data available

No data available

### Skin corrosion/irritation

Causes skin burns.

### Serious eye damage/eye irritation

Risk of serious damage to eyes.

## Respiratory or skin sensitisation

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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by ACGIH.

### Reproductive toxicity

No data available

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

### **Additional Information**

RTECS: NO7175000

Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer., Nausea, Dizziness, Headache, Weakness, Incoordination., Confusion., Cyanosis, Coma

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

## 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

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

### 12.6 Other adverse effects

No data available

### 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

### Contaminated packaging

Dispose of as unused product.

#### 14. TRANSPORT INFORMATION

# TDG (Canada)

UN number: 3260 Class: 8 Packing group: II
Proper shipping name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.

Poison Inhalation Hazard: No

**IMDG** 

UN number: 3260 Class: 8 Packing group: II EMS-No: F-A, S-B Proper shipping name: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. (Ferric nitrate nonahydrate)

**IATA** 

UN number: 3260 Class: 8 Packing group: II

Proper shipping name: Corrosive solid, acidic, inorganic, n.o.s. (Ferric nitrate nonahydrate)

## 15. REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

### 16. OTHER INFORMATION

### Full text of H-Statements referred to under sections 2 and 3.

Eye Dam. Serious eye damage

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

Skin Corr. Skin corrosion

### **Further information**

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. ACP Chemicals Inc and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.

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