

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Issue date: 05/04/2011 Revision date: 26/01/2026 Supersedes version of: 29/11/2022 Version: 1.4

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

## 1.1. Product identifier

Product form	: Substance
Trade name	: Iron (III) nitrate nonahydrate Analytical Grade ACS
EC-No.	: 233-899-5
CAS-No.	: 7782-61-8
Product code	: IRNA-09A
Formula	: FeN <sub>3</sub> O <sub>9</sub> · 9H <sub>2</sub> O

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

## Relevant identified uses

Main use category	: Laboratory use
-------------------	------------------

## 1.3. Details of the supplier of the safety data sheet

Labbox Labware S.L.  
Migjorn, 1  
08338 Premia de Dalt, Barcelona  
España  
T +34 937 07 79 70, F +34 937 909 532  
[info@labbox.com](mailto:info@labbox.com), [www.labbox.com](http://www.labbox.com)

## 1.4. Emergency telephone number

Emergency number	: +34 937 077 970 (For technical information_Office Hours) In case of medical emergency phone 112 or to your local emergency number. 24 hours a day, 7 days a week
------------------	--

Country/Area	Organisation	Emergency number
United Kingdom	National Poisons Information Service (Belfast Centre). Royal Victoria Hospital. Grosvenor Road BT12 6BA Belfast.	0344 892 0111 Only for healthcare professionals

## SECTION 2: Hazards identification

## 2.1. Classification of the substance or mixture

## Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 1, Sub-Category 1B H314

Full text of H- and EUH-statements: see section 16

## Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

## Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) : Danger

Hazard statements (CLP) : H314 - Causes severe skin burns and eye damage.

# Iron (III) nitrate nonahydrate Analytical Grade ACS

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Precautionary statements (CLP)	: 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.
--------------------------------	---

### 2.3. Other hazards

Other hazards which do not result in classification	: Does not contain PBT and/or vPvB substances ≥ 0.1% evaluated according to Annex XIII of REACH.
---	--

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name	Product identifier	%
Iron (III) nitrate nonahydrate	CAS-No.: 7782-61-8 EC-No.: 233-899-5	100

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Call a physician immediately.
First-aid measures after skin contact	: Wash skin with plenty of water. Wash contaminated clothing before reuse. Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an eye specialist.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Obtain emergency medical attention.
Self protection of the first- aider	: First aid workers will be equipped with suitable personal protective equipment.

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

Symptoms/effects after inhalation	: May cause respiratory irritation.
Symptoms/effects after skin contact	: Causes skin irritation. Burns.
Symptoms/effects after eye contact	: Causes serious eye irritation.
Symptoms/effects after ingestion	: Burns.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Foam. Dry powder. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: May intensify fire; oxidiser.
Explosion hazard	: No direct explosion hazard.
Hazardous decomposition products in case of fire	: Toxic fumes may be released.

# Iron (III) nitrate nonahydrate Analytical Grade ACS

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 5.3. Advice for firefighters

Firefighting instructions	: Exercise caution when fighting any chemical fire. Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information	: Combustible.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.
<b>For non-emergency personnel</b>	
Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area. Evacuate unnecessary personnel. Avoid contact with skin and eyes. Do not breathe dust.
<b>For emergency responders</b>	
Protective equipment	: Use personal protective equipment as required. Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Ventilate area. Evacuate unnecessary personnel.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment	: Using a clean shovel, put the material in a dry container and cover without compressing it.
Methods for cleaning up	: Mechanically recover the product. Collect spillage. On land, sweep or shovel into suitable containers.
Other information	: Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed	: Not expected to present a significant hazard under anticipated conditions of normal use.
Precautions for safe handling	: Ensure good ventilation of the work station. Avoid contact with skin and eyes. Do not breathe dust. Wear personal protective equipment.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Wash contaminated clothing before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Keep in a cool, well-ventilated place away from heat.
Storage conditions	: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Store in a well-ventilated place. Keep container tightly closed.
Incompatible materials	: Sources of ignition.
Storage area	: Store away from heat. Store in a well-ventilated place.
Special rules on packaging	: Keep only in original container. Store in a closed container.

### 7.3. Specific end use(s)

Laboratory chemicals.

# Iron (III) nitrate nonahydrate Analytical Grade ACS

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

No additional information available

#### 8.2. Exposure controls

##### Appropriate engineering controls

###### Appropriate engineering controls:

Ensure good ventilation of the work station.

##### Personal protection equipment

###### Personal protective equipment symbol(s):



##### Eye and face protection

###### Eye protection:

Chemical goggles or face shield

##### Skin protection

###### Skin and body protection:

Wear a mask

##### Hand protection:

protective gloves

##### Other skin protection

###### Materials for protective clothing:

Wear protective clothing

##### Respiratory protection

###### Respiratory protection:

Wear appropriate mask

##### Environmental exposure controls

###### Environmental exposure controls:

Avoid release to the environment.

###### Other information:

The present safety data sheet is consistent with the specific conditions relied on to justify the registration of the substance as isolated intermediate. Do not eat, drink or smoke when using this product. Wash hands with water as a precaution.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Not available
Appearance	: Powder. Crystals.
Molecular mass	: 404 g/mol
Odour	: Not available
Odour threshold	: Not available
Melting point	: 47 °C
Freezing point	: Not available
Boiling point	: 125 °C
Flammability	: Non flammable
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable

# Iron (III) nitrate nonahydrate Analytical Grade ACS

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Auto-ignition temperature	: Not applicable
Decomposition temperature	: ≈ 100 °C (Release of water of crystallization)
pH	: 1,3 20° C
pH solution	: 100 g/l
Viscosity, kinematic	: Not applicable
Solubility	: Material highly soluble in water. Soluble in ethanol. Soluble in acetone.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 1,6429 g/cm³ 20° C
Relative density	: Not available
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Direct sunlight. Overheating.

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified
Skin corrosion/irritation	: Causes severe skin burns. pH: 1,3 20° C
Serious eye damage/irritation	: Assumed to cause serious eye damage pH: 1,3 20° C
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

# Iron (III) nitrate nonahydrate Analytical Grade ACS

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: Before neutralisation, the product may represent a danger to aquatic organisms.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified

### 12.2. Persistence and degradability

#### Iron (III) nitrate nonahydrate Analytical Grade ACS (7782-61-8)

Persistence and degradability	Not rapidly degradable
-------------------------------	------------------------

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties	: Substance(s) not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.
--	--

### 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Must follow special treatment according to local regulation.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

### 14.1. UN number or ID number

UN-No. (ADR)	: UN 3260
UN-No. (IMDG)	: UN 3260
UN-No. (IATA)	: UN 3260
UN-No. (ADN)	: UN 3260
UN-No. (RID)	: UN 3260

# Iron (III) nitrate nonahydrate Analytical Grade ACS

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### 14.2. UN proper shipping name

Proper Shipping Name (ADR)	: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
Proper Shipping Name (IMDG)	: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
Proper Shipping Name (IATA)	: Corrosive solid, acidic, inorganic, n.o.s.
Proper Shipping Name (ADN)	: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
Proper Shipping Name (RID)	: CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
Transport document description (ADR) (ADR)	: UN 3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. Iron (III) nitrate nonahydrate , 8, II, (E)
Transport document description (IMDG)	: UN 3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S. Iron (III) nitrate nonahydrate , 8, II
Transport document description (IATA)	: UN 3260 Corrosive solid, acidic, inorganic, n.o.s. Iron (III) nitrate nonahydrate , 8, II
Transport document description (ADN)	: UN 3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S., 8, II
Transport document description (RID)	: UN 3260 CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S., 8, II

### 14.3. Transport hazard class(es)

#### ADR

Transport hazard class(es) (ADR)

: 8

Danger labels (ADR)

: 8



#### IMDG

Transport hazard class(es) (IMDG)

: 8

Danger labels (IMDG)

: 8



#### IATA

Transport hazard class(es) (IATA)

: 8

Danger labels (IATA)

: 8



#### ADN

Transport hazard class(es) (ADN)

: 8

Danger labels (ADN)

: 8



#### RID

Transport hazard class(es) (RID)

: 8

Danger labels (RID)

: 8



### 14.4. Packing group

Packing group (ADR)

: II

# Iron (III) nitrate nonahydrate Analytical Grade ACS

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Packing group (IMDG)	:	II
Packing group (IATA)	:	II
Packing group (ADN)	:	II
Packing group (RID)	:	II

### 14.5. Environmental hazards

Dangerous for the environment	:	No
Marine pollutant	:	No
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-B
Other information	:	No supplementary information available

### 14.6. Special precautions for user

#### Overland transport

Classification code (ADR)	:	C2
Special provisions (ADR)	:	274
Limited quantities (ADR)	:	1kg
Excepted quantities (ADR)	:	E2
Packing instructions (ADR)	:	P002, IBC08
Special packing provisions (ADR)	:	B4
Mixed packing provisions (ADR)	:	MP10
Portable tank and bulk container instructions (ADR)	:	T3
Portable tank and bulk container special provisions (ADR)	:	TP33
Tank code (ADR)	:	SGAN
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	2
Special provisions for carriage - Packages (ADR)	:	V11
Hazard identification number (Kemler No.)	:	80
Orange plates	:	
Tunnel restriction code (ADR)	:	E
EAC code	:	2X

#### Transport by sea

Special provisions (IMDG)	:	274
Limited quantities (IMDG)	:	1 kg
Excepted quantities (IMDG)	:	E2
Packing instructions (IMDG)	:	P002
IBC packing instructions (IMDG)	:	IBC08
IBC special provisions (IMDG)	:	B21, B4
Tank instructions (IMDG)	:	T3
Tank special provisions (IMDG)	:	TP33
Stowage category (IMDG)	:	B
Segregation (IMDG)	:	SGG1, SG36, SG49
Properties and observations (IMDG)	:	Causes burns to skin, eyes and mucous membranes.

#### Air transport

PCA Excepted quantities (IATA)	:	E2
PCA Limited quantities (IATA)	:	Y844
PCA limited quantity max net quantity (IATA)	:	5kg
PCA packing instructions (IATA)	:	859
PCA max net quantity (IATA)	:	15kg
CAO packing instructions (IATA)	:	863
CAO max net quantity (IATA)	:	50kg
Special provisions (IATA)	:	A3, A803
ERG code (IATA)	:	8L

# Iron (III) nitrate nonahydrate Analytical Grade ACS

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### Inland waterway transport

Classification code (ADN)	:	C2
Special provisions (ADN)	:	274
Limited quantities (ADN)	:	1 kg
Excepted quantities (ADN)	:	E2
Equipment required (ADN)	:	PP, EP
Number of blue cones/lights (ADN)	:	0

### Rail transport

Classification code (RID)	:	C2
Special provisions (RID)	:	274
Limited quantities (RID)	:	1kg
Excepted quantities (RID)	:	E2
Packing instructions (RID)	:	P002, IBC08
Special packing provisions (RID)	:	B4
Mixed packing provisions (RID)	:	MP10
Portable tank and bulk container instructions (RID)	:	T3
Portable tank and bulk container special provisions (RID)	:	TP33
Tank codes for RID tanks (RID)	:	SGAN
Transport category (RID)	:	2
Special provisions for carriage – Packages (RID)	:	W11
Colis express (express parcels) (RID)	:	CE10
Hazard identification number (RID)	:	80

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU-Regulations

##### REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

##### REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

##### REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

##### PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

##### POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

##### Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

##### Council Regulation (EC) for the control of dual-use items

Not listed on the COUNCIL REGULATION (EC) of dual-use items.

##### Explosives Precursors Regulation (EU 2019/1148)

Not listed on the Explosives Precursors list (EU)

##### Drug Precursors Regulation (EC 273/2004)

Not listed on the Drug Precursors list (EU)

# Iron (III) nitrate nonahydrate Analytical Grade ACS

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

### National regulations

#### Denmark

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product

#### Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 516).

#### Netherlands

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : The substance is not listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

#### Poland

Polish National Regulations : Act of 25 February 2011 on chemical substances and their mixtures (J. o L. No. 63, item 322 as amended; consolidated text J. o L. 2019, item 1225).  
Act of 14 December 2012 on waste (J. o L. 2013, item 322 as amended; consolidated text J. o L. 2020, item 797).  
The announcement of Marshal of the Sejm of the Republic of Poland dated 19 October 2016 concerning the consolidated text announcement of the decree on the management of packaging and packaging waste (J. o L. 2016, item 1863 as amended).  
Decree of the Minister of Environment of 14 December 2014 on the catalogue of waste (J. o L. 2014, item 1923).  
Act of 19 August 2011 on the Carriage of Dangerous Goods (J. o L. 2011 No. 227, item 1367 as amended; consolidated text J. o L. 2020, item 154).  
Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the highest permissible concentration and intensity of noxious agents for health at work environment (J. o L. item 1286 as amended).  
The announcement of Minister of Health dated 9 September 2016 concerning the consolidated text announcement of the decree of the Minister of Health of 30 December 2004 on health and safety at work related to exposure to chemical agents at work (J. o L. of 16 September 2016, item 1488).  
Regulation of the Minister of Health of 2 February 2011 on tests and measurements of the noxious agents for health at work environment (J. o L. No. 33, item 166 as amended).  
Regulation of the Minister of Environment of 9 December 2003 on particularly hazardous substances to the environment (J. o L. No. 217, item 2141).  
ADR Agreement: Government Statement of 13 March 2023 on the entry into force of amendments to Annexes A and B to the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed in Geneva on 30 September 1957 (J. o. L. 2023, item 891).  
Regulation of the Minister of Health of 25 August 2015 on the method of marking places, pipelines, and containers and tanks used for storing or containing hazardous substances or hazardous mixtures (J.o.L. 2015, item 1368 as amended)

### 15.2. Chemical safety assessment

No additional information available

## SECTION 16: Other information

### Full text of H- and EUH-statements:

Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
H314	Causes severe skin burns and eye damage.

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.