according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU

Ammonium iron(III) oxalate trihydrate ≥99%, Pure, Approx. 13% Fe

Laboratoriumdiscounter

article number: PRG123.1 Version: 1.0 en

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

#### 1.1 **Product identifier**

Identification of the substance Ammonium iron(III) oxalate trihydrate

13268-42-3

Article number PRG123.1

Registration number (REACH) This information is not available.

EC number 220-952-2 CAS number

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

Identified uses: laboratory chemical

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

Laboratoriumdiscounter Zandvoortstraat 75 1976BN Ijmuiden Nederland

Telephone: +31 (0) 255 700 210 e-mail: info@laboratoriumdiscounter.nl Website: www.laboratoriumdiscounter.nl

Competent person responsible for the safety data

sheet

: Department Health, Safety and Environment

: info@laboratoriumdiscounter.nl e-mail (competent person)

1.4 **Emergency telephone number** 

> **Emergency information service** Poison Centre Munich: +49/(0)89 19240

#### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

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

#### Classification acc. to GHS **Section Hazard class** Hazard class and cat-Hazard egory statement 3.10 acute toxicity (oral) (Acute Tox. 4) H302 3.1D acute toxicity (dermal) (Acute Tox. 4) H312

#### 2.2 Label elements

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

Signal word Warning

#### **Pictograms**



#### **Hazard statements**

H302+H312 Harmful if swallowed or in contact with skin

#### **Precautionary statements**

#### Precautionary statements - prevention

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/eyeprotection.

### Precautionary statements - response

P302+P352 IF ON SKIN: Wash with plenty of water.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Warning

Symbol(s)



P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/eye protection. P302+P352 IF ON SKIN: Wash with plenty of water.

#### 2.3 Other hazards

There is no additional information.

# SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Name of substance Ammonium iron(III) oxalatetrihydrate

EC number 220-952-2

CAS number 13268-42-3

Molecular formula C<sub>6</sub>H<sub>15</sub>FeN<sub>3</sub>O<sub>12</sub>\*3H<sub>2</sub>O 431,1 <sup>g</sup>/<sub>mol</sub>

Molar mass

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#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures



#### **General notes**

Take off contaminated clothing.

#### Following inhalation

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

# Following skin contact

Rinse skin with water/shower. In all cases of doubt, or when symptoms persist, seek medical advice.

### Following eye contact

Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following ingestion

Rinse mouth with water (only if the person is conscious). Call a doctor.

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

Irritant effects, Headache, Nausea, Vomiting, Diarrhoea, Spasms, Circulatory collapse

# 3. Indication of any immediate medical attention and special treatment needed none

# **SECTION 5: Firefighting measures**

#### 1. Extinguishing media

#### Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings water spray, foam, dry extinguishing powder, carbon dioxide (CO2)

#### Unsuitable extinguishing media

water jet

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

Combustible.

#### **Hazardous combustion products**

In case of fire may be liberated: ammonia (NH3), nitrogen oxides (NOx), carbon monoxide (CO), carbon dioxide (CO2)

#### 3. Advice for firefighters

Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

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# **SECTION 6: Accidental release measures**

#### 1. Personal precautions, protective equipment and emergencyprocedures

#### For non-emergency personnel

Do not breathe dust. Avoid contact with skin and eyes.

## 2. Environmental precautions

Keep away from drains, surface and ground water.

# 3. Methods and material for containment and cleaning up

#### Advices on how to contain a spill

Covering of drains.

#### Advices on how to clean up a spill

Take up mechanically. Control of dust.

#### Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 4. Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

# **SECTION 7: Handling and storage**

#### 1. Precautions for safe handling

Avoid dust formation. Provide adequate ventilation. Clear contaminated areas thoroughly.

#### · Measures to prevent fire as well as aerosol and dust generation

Removal of dust deposits.

#### Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs. Wash hands before breaks and after work.

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

Keep container tightly closed. Store in a dry place.

#### Incompatible substances or mixtures

Observe hints for combined storage.

#### Consideration of other advice

#### Ventilation requirements

Use local and general ventilation.

# · Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25 °C.

#### 3. Specific end use(s)

No information available.

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# SECTION 8: Exposure controls/personal protection

#### 8.1 **Control parameters**

#### National limit values

#### Occupational exposure limit values (Workplace Exposure Limits)

Coun- try	Name of agent	Notation	Identifier	TWA [mg/m³]	STEL [mg/m³]	Source
GB	dust	i	WEL	10		EH40/2005
GB	dust	r	WEL	4		EH40/2005

#### Notation

Inhalable fraction Respirable fraction

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-

minute period unless otherwise specified
Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 TWA

hours time-weighted average

#### 8.2 **Exposure controls**

#### Individual protection measures (personal protective equipment)







#### Eye/face protection

Use safety goggle with side protection.

#### Skin protection

#### hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

#### · type of material

NBR (Nitrile rubber)

#### material thickness

>0,11 mm

#### breakthrough times of the glove material

>480 minutes (permeation: level 6)

#### other protection measures

Take recovery periods for skinregeneration. Preventive skinprotection(barriercreams/ointments) is recommended.

#### Respiratory protection

Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P2 (filters at least 94 % of airborne particles, colour code: White).

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## **Environmental exposure controls**

Keep away from drains, surface and ground water.

# SECTION 9: Physical and chemical properties

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

**Appearance** 

Physical state solid (crystalline)

Colour light green

Odour faintly perceptible

Odour threshold No data available

Other physical and chemical parameters

pH (value)  $4-5 (50 \text{ g/}_{1}, 20 \text{ °C})$ 

Meltingpoint/freezing point 160 − 170 °C

Initial boiling point and boiling range This information is not available.

Flash point not applicable

Evaporation rate no data available

Flammability(solid, gas) These information are not available

**Explosive limits** 

·lower explosion limit (LEL)
 · upper explosion limit (UEL)
 this information is not available
 Explosion limits of dust clouds
 these information are not available
 Vapour pressure
 This information is not available.

Density  $1,78 \, \mathrm{g/cm^3}$  at  $20 \, \mathrm{C}$ 

Vapour density This information is not available.

Relative density Information on this property is not available.

Solubility(ies)

Water solubility  $\sim 1.000 \,^{\rm g}/_{\rm l}$  at 20  $^{\circ}{\rm C}$ 

Partition coefficient

n-octanol/water (log KOW) This information is not available.

Auto-ignition temperature Information on this property is not available.

Decomposition temperature no data available

Viscosity not relevant (solid matter)

Explosive properties Shall not be classified as explosive

Oxidising properties none

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#### 9.2 Other information

There is no additional information.

# **SECTION 10: Stability and reactivity**

#### 1. Reactivity

Dust explosibility.

#### 2. Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

#### 3. Possibility of hazardous reactions

Violent reaction with: Oxidisers

#### 4. Conditions to avoid

There are no specific conditions known which have to be avoided.

#### 5. Incompatible materials

There is no additional information.

#### 6. Hazardous decomposition products

Hazardous combustion products: see section 5.

# **SECTION 11: Toxicological information**

#### 1. Information on toxicological effects

Data on similar substances were used.

#### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

#### Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

#### Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

# Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant

### · Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

#### · Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

#### **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

#### Symptoms related to the physical, chemical and toxicological characteristics

#### If swallowed

nausea, vomiting, diarrhoea

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#### If in eyes

causes slight to moderate irritation

#### If inhaled

irritant effects, cough, breathing difficulties

#### · If on skin

Frequently or prolonged contact with skin may cause dermal irritation, risk of absorption via the skin

#### Other information

 $Other adverse\ effects: Circulatory\ collapse,\ Cardia carrhythmias,\ Blood\ pressure\ drop,\ Spasms,\ Renalimpairment$ 

# **SECTION 12: Ecological information**

### 1. Toxicity

acc. to 1272/2008/EC: Shall not be classified as hazardous to the aquatic environment.

#### 2. Process of degradability

Theoretical Oxygen Demand with nitrification: 0,2907 mg/mg

Theoretical Oxygen Demand: 0,1113 mg/mg Theoretical Carbon Dioxide: 0,6125 mg/mg

#### 3. Bioaccumulative potential

Data are not available.

#### 4. Mobility in soil

Data are not available.

#### 5. Results of PBT and vPvB assessment

Data are not available.

#### 6. Other adverse effects

Data are not available.

# **SECTION 13: Disposal considerations**

#### 1. Waste treatment methods

This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Sewage disposal-relevant information

Do not empty into drains.

#### 2. Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

#### 3. Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

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# SECTION 14: Transport information

1. UN number (not subject to transport regulations)

2. UN propershipping name not relevant

3. Transporthazardclass(es) not relevant

Class -

4. Packing group not relevant

5. Environmental hazards none (non-environmentally hazardous acc. to the danger-

ous goods regulations)

6. Special precautions for user

There is no additional information.

7. Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

8. Information for each of the UN Model Regulations

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

Not subject to ADR, RID and ADN.

• International Maritime Dangerous Goods Code (IMDG)

Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR)

Not subject to ICAO-IATA.

# SECTION 15: Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)
  - Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC) Not listed.
  - Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS) Not listed.
  - Regulation 850/2004/EC on persistent organic pollutants (POP) Not listed.
  - Restrictions according to REACH, Annex XVII not listed
  - List of substances subject to authorisation (REACH, Annex XIV) not listed
  - Seveso Directive

2012/18/EU (Seveso III)					
N	0/	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements		
		not assigned			

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not listed

Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)

not listed

#### **National inventories**

Substance is listed in the following national inventories:

- EINECS/ELINCS/NLP (Europe)

#### 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance.

# **SECTION 16: Other information**

#### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
DGR	Dangerous Goods Regulations (see IATA/DGR)
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STEL	short-term exposure limit
TWA	time-weighted average

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Abbr.	Descriptions of used abbreviations
vPvB	very Persistent and very Bioaccumulative
WEL	workplace exposure limit

## Key literature references and sources for data

- Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU Regulation (EC) No. 1272/2008 (CLP, EU GHS)
- Dangerous Goods Regulations (DGR) for the air transport (IATA)
- International Maritime Dangerous Goods Code (IMDG)

# List of relevant phrases (code and full text as stated in chapter 2 and 3)

C	ode	Text
H	302	harmful if swallowed
H	312	harmful in contact with skin

#### **Disclaimer**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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