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

1.1 Product identification:

Product name/name:	Iron(III)nitrate nonahydrate ≥96 %, pure
Registration number (REACH):	01-2119978293-27-xxxx
EC no:	233-899-5
CAS number:	7782-61-8

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

Identified uses:	Laboratory chemicals. Analytical and laboratory applications.
Uses advised against:	Do not use for spraying or atomising. Not to be used for products that come into direct contact with the skin. Not to be used for private purposes (household). Food, drink and animal feed.

1.3 Details of the supplier of the safety data sheet:

Responsible distributor :	ASSYST bvba / A.S.O.W. bvba Hellegatstraat 13a 2590 Berlaar Belgium Tel: +32 495 50 61 14 / +32 496 83 70 27 Website: www.assyst.org / www.artsuppliesonweb.com Email: ao@assyst.org / vera.opsommer@assyst.org

1.4 Emergency phone number:

For Belgium:	Call the **Poison Control Centre (070 245 245 - free)**, if not available: **02 264 96 30** (normal rate) or your doctor. In life-threatening situations, always call the European emergency number **112**.
NHS 24 Direct	For help from a GP, visit your GP surgery's website, use an online service to contact your GP, or call the surgery. **For urgent medical help**, use the NHS 111 online service, or **call 111** if you are unable to get help online. **For life-threatening emergencies, call 999** for an ambulance. There is more information about getting medical help on the NHS website.

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture:

Classification according to directive (EC) No 1272/2008 and its amendments.

Skin corrosion/irritation 1B Skin Corr. 1B H314
Serious eye damage/eye irritation 1 Eye Dam. 1 H318
See SECTION 16 for full text

Main adverse physicochemical, health and environmental effects

Skin corrosion causes irreversible damage to the skin; that is, visible necrosis occurs through the epidermis into the dermis.

2.2 Labelling elements:

Labelling according to regulation (EC) No 1272/2008 [CLP/GHS]:

Hazard pictograms:

Signal word: Danger

Hazard statements:

H314 Causes severe burns and eye damage.

Safety recommendations:
Precautions - prevention:
P280 Wear protective gloves/eye protection.
Precautions - reaction:
P303+P361+P353 IF ON SKIN (or hair): remove contaminated clothing immediately. Rinse skin with water [or shower off].
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes; remove contact lenses, if possible; continue rinsing.
P310 Immediately consult a POISON CENTER/doctor.
Labelling of packages with a total content not exceeding 125 ml
Signal word: Danger

Symbol/symbols:

H314 Causes severe burns and eye damage.
P280 Wear protective gloves/eye protection.
P303+P361+P353 IF CONTACT WITH SKIN (or hair): Remove contaminated clothing immediately. Rinse skin with water or shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes; remove contact lenses, if possible; continue rinsing.
P310 Consult an ANTIGENCENTRUM/doctor immediately.
2.3 Other hazards:
Results of PBT and vPvB assessment
The results of the assessment of the substance show that it is not a PBT or vPvB substance.
Endocrine-disrupting properties
Contains no endocrine disruptor (ED) at a concentration of ≥ 0.1%.

SECTION 3: Composition and information on ingredients

3.1 Substances:

Name of substance:	Iron(III)nitrate nonahydrate
Molecular formula:	$Fe(NO_3)_3$ - 9 H_2O
Molar mass:	404 g/mol
REACH reg. no:	01-2119978293-27-xxxx
CAS No:	7782-61-8
EC no:	233-899-5

SECTION 4: First aid measures

4.1 Description of first-aid measures:
General comments
Remove contaminated clothing immediately.
Self-protection for first responders.
When inhaled
Provide fresh air.
If in doubt or if symptoms persist, consult a doctor.
In case of skin contact
After contact with skin, wash immediately with plenty of water.
Treatment by a doctor is immediately necessary, as untreated burns can turn into wounds that are difficult to heal.
On eye contact
In case of contact with eyes, rinse immediately with opened eyelids for 10 to 15 minutes with running water and consult an ophthalmologist.
Protect undamaged eye.

If swallowed
Immediately rinse out mouth and drink plenty of water.
Consult a doctor immediately.
If swallowed, there is a risk of perforation of the oesophagus and stomach (strong caustic effect).
4.2 Main acute and delayed symptoms and effects
Corrosion, Risk of blindness, Stomach perforation, Risk of serious eye damage.
4.3 Indication of any immediate medical care and special treatment needed
None.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media:
Suitable extinguishing agents
Match fire-fighting measures to the environment!
Water, foam, alcohol-resistant foam, dry extinguishing powder, ABC powder.
Unsuitable extinguishing agents
Full water jet.
5.2 Special hazards arising from the substance or mixture
Non-flammable.
Hazardous combustion products
In case of fire, it may produce: Nitrogen oxides (NOx).
5.3 Advice for firefighters
In case of fire and/or explosion, avoid breathing fumes.
With normal precautions, extinguish from a reasonable distance.
Wear self-contained breathing apparatus.
Wear chemical protective suit.

SECTION 6: Measures in case of accidental release of the substance or mixture

6.1 Personal precautions, protective equipment and emergency procedures:
For persons other than emergency services
Use the necessary personal protective equipment.
Avoid contact with skin, eyes and clothing.
Do not inhale dust.
6.2 Environmental precautions
Avoid getting the product into drains, surface water or groundwater.
Retain and remove contaminated wash water.
The product is an acid.
Before pouring into treatment plant, neutralise the product.
6.3 Containment and cleaning methods and materials
Advice on how to contain the spill
Covering drains.
Mechanical recording.
Advice on how to clean up the spill
Mechanical recording.
Combating dust formation.
Other information relating to the discharge or release
Put into suitable retainers for disposal.
Ventilate the affected area.
6.4 Reference to other sections
Hazardous combustion products: see section 5.
Personal protective equipment: see section 8.
Incompatible materials: see section 10.

Instructions for disposal: see section 13.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling of the substance or mixture:

Handle and open packaging carefully.
Avoid dust generation.
Thoroughly clean contaminated surfaces.

Measures to prevent fire and aerosol or dust formation

Removal of dust deposits.

Advice on general occupational hygiene

Wash hands before work breaks and end of work.
Keep away from food, drink and animal feed.

7.2 Conditions for safe storage, including incompatibilities

Store in a dry place.
Keep in tightly closed container.
Hygroscopic solid.

Incompatible substances or mixtures

Note advice for chemical storage.

Protect against external exposure, such as

high temperatures, humidity.

Consideration of other advice:

Ventilation requirements

Use of local and general ventilation.

Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25°C.

7.3 Specific end use

No information is available.

SECTION 8: Exposure controls/personal protection measures

8.1 Control parameters:

National limits

Occupational exposure limits (occupational exposure limits)

This information is not available.

Human health values

Relevant DNEL and other thresholds

End point	Threshold	Protection objective, route of exposure	Used in	Exposure time
DNEL	12 mg/m³	human, via inhalation	(industrial) employees	chronic - systemic effects
DNEL	17 mg/kg bw/day	human, through the skin	(industrial) employees	chronic - systemic effects

Environmental values

Relevant PNEC and other thresholds

End point	Threshold	Organism	Environmental compartments	Exposure time
PNEC	0.024 mg/l	Aquatic organisms	Freshwater	short-term (one-off)
PNEC	0.002 mg/l	aquatic organisms	Seawater	short-term (one-off)
PNEC	500 mg/l	aquatic organisms	sewage treatment plants (STP)	short-term (one-off)
PNEC	0.2 mg/kg	aquatic organisms	Freshwater sediment	short-term (one-off)
PNEC	0.02 mg/kg	aquatic organisms	Sea water sediment	short-term (one-off)
PNEC	0.026 mg/kg	terrestrial organisms	Bottom	short-term (one-off)

8.2 Exposure control measures

Individual protection measures (personal protective equipment)

Eye/face protection

Wear safety goggles with side protection.
Wear face protection.

Skin protection
Hand protection
Wear suitable gloves.
Suitable are EN 374-tested gloves against chemicals.
Determine leak tightness/impermeability before use.
It is recommended that in case of special applications, the chemical resistance of the safety gloves mentioned above be checked together with the supplier of the gloves.
Times are estimated values from measurements at 22°C and permanent contact.
Increased temperatures due to heated fabrics, body heat, etc.
And a reduction in effective layer thickness due to stretching can lead to a significant reduction in breakthrough time.
If in doubt, contact the manufacturer.
For a layer thickness approximately 1.5 times larger / smaller, the respective breakthrough time is doubled / halved.
The data applies only to the pure substance.
When transferred to mixtures of substances, they should only be considered as guidelines.
Type of material
NBR (nitrile rubber)
Material thickness
>0.3 mm
Breakthrough time of glove material
>480 minutes (permeation level: 6)
Other protective equipment
Insert rest periods for skin regeneration.
Preventive skin protection (skin-protective creams) is recommended.
Protection of respiratory organs
Respiratory protection is necessary in case of: Dust generation.
Particle filter (EN 143). P1 (filters at least 80% of air particles, colour code: white).
Managing environmental exposure
Avoid getting the product into drains, surface water or groundwater.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Physical state:	solid
Colour:	light blue - purple
Odour:	faintly perceptible
Melting/freezing point:	47.2°C (ECHA)
Boiling point or initial boiling point and boiling range:	125°C (ECHA)
Flammability:	non-flammable
Lower and upper explosion limit:	not determined
Flash point:	not applicable
Self-ignition temperature:	undetermined
Decomposition temperature:	~100°C (Release of crystalline water)
pH value:	1.3 (in aqueous solution: 100 g/l, 20°C)
Kinematic viscosity:	irrelevant
Solubility	
Solubility in water:	825 g/l (ECHA)
Partition coefficient	
Partition coefficient n-octanol/water (log value):	not relevant (inorganic)
Vapour pressure:	not determined
Density and/or relative density	
Density:	1.68 g/cm³ at 25°C (ECHA)

Relative vapour density:	No information is available with this property.
Bulk density:	~900 kg/m³
Particle characteristics:	No data available.
Other safety parameters	
Oxidising properties:	no
9.2 Other information	
Information on physical hazard classes:	hazard classes in accordance with GHS (physical hazards): not relevant
Other safety features:	There is no further information.

SECTION 10: Stability and reactivity

10.1 Reactivity:
This substance is not reactive under normal ambient conditions.
10.2 Chemical stability
The material is stable under normal atmospheric conditions and expected temperature and pressure during storage and handling.
10.3 Possible hazardous reactions
Violent reaction with: Reducing agents, Strong lye, Dimethyl sulphoxide (DMSO).
10.4 Conditions to avoid
Keep away from heat.
Decomposition occurs from temperatures of: ~100°C.
Protect against moisture.
10.5 Incompatible materials
There is no further information.
10.6 Hazardous decomposition products
Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects:
Classification according to GHS (1272/2008/EC, CLP)
Acute toxicity
Is not classifiable as acutely toxic.

Route of exposure	End point	Value	Species	Method	Source
Oral	LD50	>2,000 mg/kg	Rat		ECHA
Dermal	LD50	>2,000 mg/kg	Rat		ECHA

Skin corrosion/irritation
Causes severe burns and eye damage.
Serious eye damage/eye irritation
Causes severe eye irritation.
Respiratory or skin sensitisation
Is not classifiable as an inhalant or skin allergen.
Mutagenicity in gametes
Is not classifiable as mutagenic in germ cells (mutagenic).
Carcinogenicity
Is not classifiable as carcinogenic.
Reproductive toxicity
Is not classifiable as a reproductive toxicant.
Specific target organ toxicity at single exposure
Cannot be classified as toxic to specific target organs (single exposure).
Specific target organ toxicity on repeated exposure
Cannot be classified as toxic to specific target organs (repeated exposure).
Inhalation hazard

Is not classifiable as dangerous in aspiration.
Symptoms related to physical, chemical and toxicological properties
- After swallowing
If swallowed, there is a risk of perforation of the oesophagus and stomach (strong caustic effect).
- In case of contact with eyes
Causes burns.
Causes serious eye damage, danger of blindness.
- After inhalation
No data are available.
- On contact with skin
Causes severe burns.
Causes poorly healing wounds.
- Other information
None.
11.2 Additional information
Contains no endocrine disruptor (ED) at a concentration of ≥ 0.1%.
11.3 Information on other hazards
There is no further information.

SECTION 12: Ecological information

12.1 Toxicity:
Cannot be classified as hazardous to the aquatic environment.
Aquatic toxicity (acute)

End point	Value	Species	Source	Exposure time
ErC50	130 mg/l	Alg	ECHA	72 h

Aquatic toxicity (chronic)

End point	Value	Species	Source	Exposure time
EC50	18 mg/l	aquatic invertebrates	ECHA	21 d

12.2 Persistence and Degradability:
No data are available.
12.3 Bioaccumulation:
No data are available.
12.4 Mobility in soil:
No data are available.
12.5 Results of PBT and vPvB assessment
No data are available.
12.6 Endocrine disrupting properties
Contains no endocrine disruptor (ED) at a concentration of ≥ 0.1%.
12.7 Other adverse effects
No data are available.

SECTION 13: Disposal instructions

13.1 Waste treatment methods:
Dispose of this substance and its packaging as hazardous waste.
Dispose of contents/packaging in accordance with local/regional/national/international regulations.
Information regarding wastewater discharge
Do not throw waste into the sink.
Waste treatment of containers/packaging
It is hazardous waste; only approved packaging (e.g. in accordance with ADR) may be used.
Contaminated packaging can be treated like the substance itself.
Fully emptied containers can be recycled.
Relevant provisions on waste prevention

The allocation of waste key numbers/waste markings should be industry- and process-specific in accordance with AVV.

Hazardous properties of waste

HP 4 irritant - skin irritation and eye damage
HP 8 corrosive

Comments

Waste is separated into the categories that can be treated separately by local or national waste management services.
Please note the relevant national or regional provisions.
Uncontaminated and completely empty containers can be used again.

SECTION 14: Information relating to transport

14.1 UN number or ID number

ADR/RID/ADN:	UN 3260
IMDG Code:	UN 3260
ICAO-TI:	UN 3260

14.2 Proper cargo name according to UN model regulations

ADR/RID/ADN:	CORROSIVE ACIDIC INORGANIC SOLID, N.O.S.
IMDG Code:	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
ICAO-TI:	Corrosive solid, acidic, inorganic, n.o.s.
Technical name:	Iron(III)-nitrate-Nonahydrate

14.3 Transport hazard class(es)

ADR/RID/ADN:	8
IMDG Code:	8
ICAO-TI:	8

14.4 Packing group

ADR/RID/ADN:	II
IMDG Code:	II
ICAO-TI:	II

14.5 Environmental hazards

Not hazardous to the environment, according to regulations for the transport of dangerous goods

14.6 Special precautions for the user

The provisions for dangerous goods (ADR) must also be complied with in the company.

14.7 Sea transport in bulk in accordance with IMO instruments

The cargo is not meant to be transported in bulk.

14.8 Information for each of the UN regulations

Transport of dangerous goods by road, rail or inland waterway (ADR/RID/ADN) - Additional information

Proper shipping name:	CORROSIVE ACIDIC INORGANIC SOLID, N.O.S.
Details on transport document:	UN3260, CORROSIVE ACID SOLID, N.O.S., (Iron(III)-nitrate-Nonahydrate), 8, II, (E)
Classification code:	C2
Danger labels:	8
Special provisions:	274
Exempt quantities (EQ):	E2
Limited quantities (LQ):	1 kg
Transport category:	2
Tunnel restriction code:	E
Hazard Identification Number (GEVI):	80

International Maritime Dangerous Goods Code (IMDG) - Additional information

Proper shipping name:	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
Information in the transport document (shipper's declaration):	UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S., (Iron(III)-nitrate-Nonahydrate), 8, II

Marine Pollutant (Marine Pollutant) :	-
Danger labels:	8
Special provisions:	274
Exempt quantities (EQ):	E2
Limited quantities (LQ):	1 kg
EmS:	F-A, S-B
Stowage category:	B
Segregation group:	1 - Acids

International Civil Aviation Organisation (ICAO-IATA/DGR) - Additional information

Proper shipping name:	Corrosive solid, acidic, inorganic, n.o.s.
Details on the transport document (shipper's declaration):	UN3260, Corrosive solid, acidic, inorganic, n.o.s., (Iron(III)-nitrate-Nonahydrate), 8, II
Danger labels:	8
Special provisions:	A3
Exempt quantities (EQ):	E2
Limited quantities (LQ):	5 kg

SECTION 15: Statutory information

15.1 Safety, health and environmental regulations and legislation specific to the substance or mixture:

Relevant European Union (EU) provisions

Restrictions in accordance with REACH, Annex XVII

Restricted hazardous substances (REACH, Annex XVII)

Name of substance	Name according to inventory	CAS No.	Restriction	No.
Iron (III) nitrate nonahydrate	substances in ink for tattoo or permanent make-up		R75	75

Legend

R75

1. Shall not be placed on the market in mixtures for tattooing purposes, and mixtures containing such substances shall not be used for tattooing purposes after 4 January 2022 if the substance(s) in question is/are present or the following circumstances occur:

a) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as carcinogenic category 1A, 1B or 2, or as germ cell mutagenic category 1A, 1B or 2, the concentration of that substance in the mixture is equal to or greater than 0.00005 % by weight;

b) in the case of a substance classified as toxic to reproduction category 1A, 1B or 2 in Part 3 of Annex VI to Regulation (EC) No 1272/2008, the concentration of that substance in the mixture is equal to or greater than 0.001 % by weight;

c) in the case of a substance classified as a category 1, 1A or 1B skin allergen in Part 3 of Annex VI to Regulation (EC) No 1272/2008, the concentration of that substance in the mixture is equal to or greater than 0.001 % by weight;

d) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as corrosive to the skin, category 1, 1A, 1B or 1C, or irritant to the skin, category 2, or for serious eye damage, category 1 or irritant to the eyes, category 2, the concentration of that substance in the mixture is equal to or greater than:
   i. 0.1 % by weight, if the substance is used solely as a pH regulator;
   ii. 0.01% by weight, in all other cases;

e) in the case of a substance listed in Annex II to Regulation (EC) No 1223/2009 (*1), a concentration in the mixture equal to or greater than 0,00005 % by weight; in the case of a substance for which column g (Product type, body parts) of the table in Annex IV to Regulation (EC) No 1223/2009 indicates one or more of the following types of conditions, the concentration of the substance in the mixture equal to or greater than 0,00005 % by weight:
   i. "Products washed off, out or away";
   ii. "Do not use in products applied to mucous membranes";
   iii. "Do not use in eye products";

f) in the case of a substance for which a condition is specified in column h (Maximum concentration in the product ready for use) or column i (Other) of the table in Annex IV to Regulation (EC) No 1223/2009, the concentration of the substance in the mixture does not meet the condition specified in that column, or the substance otherwise fails to meet it;

g) in the case of a substance listed in Appendix 13 to this Annex, the concentration of the substance in the mixture is equal to or greater than the concentration limit specified for that substance in that Appendix.

2. For the purposes of this entry, the use of a mixture "for tattooing purposes" means the injection or insertion of the mixture into the skin, mucous membranes or eyeball of a person by means of a process or procedure (including procedures commonly referred to as "permanent make-up", cosmetic tattooing, "microblading" and "micropigmentation"), for the purpose of leaving a permanent mark(s) or drawing on that person's body.

3. Where a substance not listed in Appendix 13 falls under more than one of items (a) to (g) of paragraph 1, the most stringent of the concentration limits set out in those items shall apply to that substance. Where a substance listed in Appendix 13 also falls under one or more of items (a) to (g) of paragraph 1, the concentration limit set out in paragraph 1(h) shall apply to that substance.
4. By way of derogation, paragraph 1 shall not apply to the following substances until 4 January 2023:
   a. Pigment Blue 15:3 (CI 74160, EC No 205-685-1, CAS No 147-14-8);
   b. Pigment Green 7 (CI 74260, EC No 215-524-7, CAS No 1328-53-6).
5. If Part 3 of Annex VI to Regulation (EC) No . 1272/2008 is amended after 4 January 2021 and thereby classifies or reclassifies a substance in such a way that it falls under (a), (b), (c) or (d) of paragraph 1 of this entry, or under a different entry than before, and if the date of application of that new or revised classification is after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall be treated, for the purposes of applying this entry to that substance, as applying on the date of application of that new or revised classification.
6. Where the entry of a substance in Annex II or Annex IV to Regulation (EC) No 1223/2009 is amended after 4 January 2021 such that the substance falls under (e), (f) or (g) of point 1 of this entry, or under a different point than before, and if the amendment takes effect after the date referred to in point 1 or, as the case may be, point 4 of this entry, that amendment shall be treated, for the purposes of applying this entry to that substance, as taking effect from the date falling 18 months after the entry into force of the act which adopted that amendment.
7. Suppliers placing a mixture on the market for tattooing purposes after 4 January 2022 shall ensure that the following information is indicated on the mixture:
   a) the text "Mixture for use in tattoos or permanent make-up";
   b) a unique batch identification reference number;
   c) the list of ingredients according to the nomenclature defined in the glossary of common ingredient names in accordance with Article 33 of Regulation (EC) No 1223/2009, or, in the absence of a common ingredient name, the IUPAC name. In the absence of a common ingredient name or IUPAC designation, the CAS and EC number. Ingredients shall be listed in descending order of weight or volume of ingredients at the time of formulation. Ingredient means any substance added during the formulation of the mixture for tattooing purposes and present therein. Impurities are not considered ingredients. Where the name of a substance used as an ingredient within the meaning of this entry must already be indicated on the label in accordance with Regulation (EC) No 1272/2008, that ingredient need not be indicated in accordance with this Regulation;
   d) the additional entry "pH regulator" for substances covered by paragraph 1(d)(ii);
   e) the statement "Contains nickel. May cause allergic reactions." if the mixture contains nickel below the concentration limit specified in Appendix 13;
   f) the statement "Contains hexavalent chromium (VI). May cause allergic reactions." if the mixture contains chromium (VI) below the concentration limit specified in Appendix 13;
   g) safety precautions for use, if not already required to be indicated on the label in accordance with Regulation (EC) No 1272/2008. The information shall be clearly visible, easily legible and indelible. The information shall appear in the official language(s) of the Member State(s) where the mixture is marketed, unless otherwise specified by the Member State(s) concerned. If there is not enough space on the packaging for the information referred to in the first subparagraph, that information shall, except as regards point (a), be included in the instructions for use. The person administering the mixture shall provide the information specified on the packaging or in the instructions for use in accordance with this point to the person undergoing the procedure before the mixture is used for tattooing purposes.
8. Mixtures without the text "Mixture for use in tattoos or permanent make-up" shall not be used for tattooing purposes.
9. This entry does not apply to substances which are gases at a temperature of 20 °C and pressure of 101.3 kPa, or which generate a vapour pressure greater than 300 kPa at a temperature of 50 °C, with the exception of formaldehyde (CAS No 50-00-0, EC No 200-001-8).
10. This entry does not apply to the placing on the market or use of mixtures for tattooing purposes that are placed on the market or used exclusively as medical devices or accessories to a medical device within the meaning of Regulation (EU) 2017/745. Where a mixture has not been placed on the market or cannot be used exclusively as a medical device or an accessory to a medical device, the requirements of Regulation (EU) 2017/745 and the requirements of this Regulation apply cumulatively.

List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list

Not stated.

Seveso Directive

2012/18/EU (Seveso III)

No.	Hazardous substance/hazard categories	Thresholds (tonnes) for application of requirements for lower and upper-tier establishments	Nuts
	Not awarded		

Decopaint Directive

VOC content: 0 %
VOC content: 0 g/l

Directive on industrial emissions (IE Directive)

VOC content: 0 %
VOC content: 0 g/l

Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

Not stated.

Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

Not stated.

Water framework directive (WFD)

List of pollutants (WFD)

Name of substance	Name according to inventory	CAS No.	Included in	Comments
Iron (III) nitrate nonahydrate	Substances contributing to eutrophication (especially nitrates and phosphates)		a)	
Iron (III) nitrate nonahydrate	Metals and metal compounds		a)	

Legend

(a) Indicative list of the main pollutants

Regulation on marketing and use of explosives precursors

Not stated.

Regulation on drug precursors

Not stated.

Regulation on ozone-depleting substances

Not stated.

Regulation on export and import of dangerous chemicals (PIC)

Not stated.

Regulation on persistent organic pollutants (POPs)

Not stated.

National regulations (Netherlands)

General assessment methodology for substances and preparations (ABM)

Water severity and remediation effort

Water heaviness	Water severity indication	Remediation effort
A (3)	harmful to aquatic organisms may cause long-term adverse effects in the aquatic environment	A

SZW list CMR effects

Not stated.

Other information

Directive 94/33/EC on the protection of young people at work. Observe work restrictions in accordance with the Pregnancy Directive (92/85/EEC) for expectant or nursing mothers.

National inventories

Country	List	Status
AU	AIIC	substance is mentioned
CA	DSL	substance is mentioned
CN	IECSC	substance is mentioned
EU	ECSI	substance is mentioned
EU	REACH Reg.	substance is mentioned
JP	CSCL-ENCS	substance is mentioned
KR	KECI	substance is mentioned
MX	INSQ	substance is mentioned
NZ	NZIoC	substance is mentioned
PH	PICCS	substance is mentioned
TW	TCSI	substance is mentioned
US	TSCA	substance is listed (ACTIVE)
UN	NCI	substance is mentioned

Legend

AIIC Australian Inventory of Industrial Chemicals
CICR Chemical Inventory and Control Regulation
CSCL-ENCS List of Existing and New Chemical Substances (CSCL-ENCS)
DSL Domestic Substances List (DSL)
ECSI EC Inventory (EINECS, ELINCS, NLP)
IECSC Inventory of Existing Chemical Substances Produced or Imported in China
INSQ National Inventory of Chemical Substances
KECI Korea Existing Chemicals Inventory

NCI National Chemical Inventory
NZIoC New Zealand Inventory of Chemicals
PICCS Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg. REACH registered substances
TCSI Taiwan Chemical Substance Inventory
TSCA Toxic Substance Control Act

15.2 Chemical safety assessment:

According to REACH, Article 14(1), a chemical safety assessment has been carried out for this substance or components of this mixture when the substance is registered in quantities of 10 tonnes or more per year per registrant.

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Aligning with regulation: Regulation (EC) No 1907/2006 (REACH), amended by 2020/878/EU.

Section 2.2:

Labelling of packages with a total content not exceeding 125 ml: change in the list (table)

Section 2.3:

Endocrine-disrupting properties: Contains no endocrine disruptor (ED) at a concentration of ≥0.1%.

Heading 15.1:

National inventories: change in listing (table)

Section 15.2:

Chemical safety assessment: According to REACH, Article 14(1), a chemical safety assessment has been carried out for this substance or components of this mixture when the substance has been registered in quantities of 10 tonnes or more per year per registrant.

List of relevant sentences (code and full text as mentioned in sections 2 and 3)

H314 Causes severe burns and eye damage.
H318 Causes serious eye damage.

Abbreviations and acronyms

ADN:	Accord européen relatif au transport internationale des marchandises Dangereuses par voies de navigation Intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR:	Accord relatif au transport internationale des marchandises Dangereuses par route (Agreement on the international carriage of dangerous goods by road)
ADR/RID/ADN:	Agreements on the international carriage of dangerous goods by road/rail/inland waterway (ADR/RID/ADN)
CAS:	Chemical Abstracts Service (database for chemicals and their unique number, the CAS registration number)
CLP:	Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging (CLP) of substances and mixtures.
CMR:	Carcinogenic, Mutagenic or Reproductive toxicity
DGR:	Dangerous Goods Regulations, regulations for the transport of dangerous goods, see IATA/DGR
DNEL:	Derived No-Effect Level.
EC50:	Effective concentration 50 %. The EC50 corresponds to the concentration of a tested substance that causes 50 % change in response (e.g. on growth) during a specified time interval
EC No.:	he EC register (EINECS, ELINCS and the NLP register) is the source for the seven-digit EC number as the prefix for substances (European Union)
ED:	Endocrine disruptor
EINECS:	European Inventory of Existing Commercial Chemical Substances.
ELINCS:	European List of Notified Chemical Substances

EmS:	Emergency Schedule (contingency plan)
ErC50:	≡ EC50: in this method, the concentration of a test substance at which a 50 % reduction in growth (EbC50) or growth rate (ErC50) occurs relative to the control
GHS:	"Globally Harmonised System of Classification and Labelling of Chemicals", developed by the United Nations
IATA:	International Air Transport Association
IATA/DGR:	Dangerous Goods Regulations (DGR) for aviation (IATA)
ICAO:	International Civil Aviation Organisation.
ICAO-TI:	Technical instructions for the safe transport of dangerous goods by air.
IMDG:	International Maritime Dangerous Goods Code (IMDG code)
IMDG Code:	International Maritime Dangerous Goods Code
LD50:	Lethal dose 50 %: the LD50 corresponds to the dose of a tested substance at which 50 % of the test subjects die during a specified time interval
NLP:	No-Longer Polymer
PBT:	Persistent, Bioaccumulative and Toxic
PNEC:	Predicted no-effect concentration
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)
SVHC:	Substance of very high concern
VOCS:	Volatile organic compounds
vPvB:	Very persistent and very bioaccumulative

Further information
Training advice:
Provide proper information, instruction and training for users.

Reference documents:
Regulation (EC) No 1272/2008 on classification, labelling and packaging (CLP) of substances and mixtures.
Regulation (EC) No 1907/2006 (REACH), as amended by 2020/878/EU.
Transport of dangerous goods by road, rail or inland waterways (ADR/RID/ADN).
International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for aviation (IATA).

Rejection of liability
This information is based on the current state of our knowledge. This safety data sheet has been compiled and is exclusively intended for this product.