



IRON SULPHATE

Safety Data Sheet

In compliance with Regulation (EC)1907/2006(REACH)

Date of issue: 24/01/2010 Revision date:

19/08/2014

In compliance with Regulation (EC)1907/2006(REACH)

Date of issue: 24/01/2010 Revision date: 19/08/2014

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

1.1. Product identifier

Product form : Substance

Product name : Iron Sulphate

REACH registration No. : 01- 2119513203-57-xxxx

1.2. Relevant identified uses of the substance or mixture and uses advised against 1.2.1. Relevant identified uses Use of the substance/preparation:

Substance used as such, in formulation or in formulation of products such as:

Precipitating agent and flocculent Waste water treatment Water treatment.

- Chromate reduction in cement
- For the purpose of land rehabilitation
- Combat of chlorosis
- Production of pigments
- Electroplating additive

1.2.2. Uses advised against

- None

Full text of use descriptors: see section 16.

1.3. Details of the supplier of the safety data sheet

Keramikos

Oudeweg 153

2031 CC Haarlem

T 023 – 542 44 16 info@keramikos.nl

1.4. Emergency telephone number 023 – 542 44 16

SDS Ref:— 19-08-2014

1

Revision 1

In compliance with Regulation (EC)1907/2006(REACH)

Date of issue: 24/01/2010 Revision date: 19/08/2014



IRON SULPHATE

Safety Data Sheet

In compliance with Regulation (EC)1907/2006(REACH)

Date of issue: 24/01/2010 Revision date:

19/08/2014

SECTION 2: Hazards identification.

2.1. Classification of the substance or mixture

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

Acute toxicity (oral), hazard category 4 Skin irritation, category 2 Eye irritation, category 2

Classification according to Directive 67/548/EEC or 1999/45/EC Harmful (Xn) R22 Harmful if swallowed.

Irritating (Xi) R36 Irritating to eyes. Irritating (Xi) R38

Irritating to skin.

Adverse physicochemical, human health and environmental effects No additional information available.

2.2. Label elements

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

Signal word: Warning Hazard designation:

H302 Harmful if swallowed.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Safety designation:

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

P301+P312 If swallowed: Call a poison center or physician if you feel unwell.

P302+P352 If on skin: Wash with soap and water.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses and continue rinsing.

P332+P313 If skin irritation occurs: Get medical attention.

P337+P313 If eye irritation persists: Get medical advice/ attention.

Hazardous components for labelling: Iron(II)-sulfate heptahydrate 2.3. Other hazards

**SECTION 3: Composition/information on ingredients.**

3.1. Substances

Chemical name	CAS No.	EC-No.	%	Classification (67/548/EEC)	Classification (1272/2008/EC)
Iron(II) sulfate heptahydrate	7782-63-0	231-753-5	100	Xn,Xi; R22-36/38	H302-315-319

Full text of R-, H- and EUH-phrases: see section 16

SDS Ref:— 19-08-2014

Revision 1

SECTION 4: First aid measures.



IRON SULPHATE

Safety Data Sheet

In compliance with Regulation (EC)1907/2006(REACH)

Date of issue: 24/01/2010 Revision date:

19/08/2014

4.1. Description of first aid measures

Inhalation: Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion: Get medical attention immediately and show them this safety data sheet

Skin contact: Wash skin with soap and water. Get medical attention if irritation persists after washing. Eye contact:

Make sure to remove any contact lenses from the eyes before rising. Rinse eye with water immediately. Get medical attention if any discomfort continues.

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

Inhalation: No information available Ingestion: No specific symptoms noted.

Skin contact: No specific symptoms noted.

Eye contact: No information available

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:

All extinguishing media allowed.

Unsuitable extinguishing media:

None.

5.2. Special hazards arising from the substance or mixture

Fire hazard: In case of fire: formation of sulfur dioxide Explosion hazard:

No explosive properties known.

Reactivity:

Stable under normal conditions of handling and storage.

5.3. Advice for firefighters

Firefighting instructions:

Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire/ Prevent fire-fighting water from entering environment.

Protection during firefighting:

Do not enter fire area without proper protective equipment, including respiratory protection.



IRON SULPHATE

Safety Data Sheet

19/08/2014

In compliance with Regulation (EC)1907/2006(REACH)

Date of issue: 24/01/2010 Revision date:

SECTION 6: Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Wear appropriate protective equipment. Keep spectators away. Avoid contact with eyes and skin. Avoid formation of dust.

6.1.1. For non-emergency personnel

Evacuate personnel to a safe area

6.1.2. For emergency responders

Equip clean up crew with proper protection. Ventilate area.

6.2. Environmental precautions

Prevent contamination of soils, drains and surface water. Contact local authorities if product pollutes soil or vegetation

6.3. Methods and material for containment and cleaning up

Clean up mechanically. Transfer liquids and solid diking material to separate suitable containers for recovery or disposal. Dispose of contaminated material as waste according to section 13.

6.4. Reference to other sections

Protective clothing, see Section 8. Dispose of contaminated material according to Section 13.

SECTION 7: Handling and storage.

7.1. Precautions for safe handling

Precautions for safe handling: No special measures necessary if properly handled.

Packagings: Suitable container material: steel, plastic.

Hygiene measures: No further measures, see Section 8

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in tightly sealed containers in a cool and well ventilated location. Protect against heat and direct sunlight. Do not store above 30°C Incompatible products: None

Incompatible materials: None

7.3. Specific end use(s)

The identified uses for this product are detailed in section 1.2



IRON SULPHATE

Safety Data Sheet

In compliance with Regulation (EC)1907/2006(REACH)

Date of issue: 24/01/2010 Revision date:

19/08/2014

SECTION 8: Exposure controls/personal protection.

8.1. Control parameters

Parameters to be controlled: Derived No-Effect Level (DNEL):

99.6 mg/kg bw/d (consumer, swallowing, short-term exposition - systemic effects)

1.4 mg/kg bw/d (consumer, swallowing, long-term exposition - systemic effects)

13.95 mg7kg bw/d (worker, skin contact, long-term exposition -systemic effects)

6.97 mg7kg bw/d (consumer, skin contact, long-term exposition - systemic effects)

Predicted No-Effect Concentration (PNEC):

Water: iron is an essential trace element for fish, aquatic invertebrates and plants. No toxicity.

Exposure Limits:

Follow workplace regulatory exposure limits for all types of airborne dust (e.g. total dust, respirable dust).

8.2. Exposure controls

Personal protection: The usual precautionary measures are to be adhered to when handling chemicals. Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work

Hand protection: Protective gloves (EN 374) Protective gloves should be changed regularly, especially after intensive contact with the product.

Eye protection: Tightly fitting safety goggles (EN 166).

Skin and body protection: Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material and dexterity. Always seek advice from glove suppliers. Please note the manufacturers' detailed statements, especially about the minimum thickness and the minimum breakthrough time.

Respiratory protection: Wear protective mask, particle filter P2 or FFP2 or NIOSH N95 (for solid and liquid particles, EN 143, 149) if dust occurs.

Environmental exposure controls: Avoid release to the environment.



IRON SULPHATE

Safety Data Sheet

19/08/2014
Revision 1

In compliance with Regulation (EC)1907/2006(REACH)

Date of issue: 24/01/2010 Revision date:

SECTION 9: Physical and chemical; properties.

Physical state	Powder
Colour Bright Green Odour	odourless.
Odour threshold	Not applicable
pH	2.5 (400 g/l, 20°C)
Relative evaporation rate (butylacetate=1)	No data available
Melting point	ca. 64°C
Freezing point	No data available
Boiling point	No data available
Flash point	Not flammable
Self ignition temperature	Not applicable
Decomposition temperature	No data available
Flammability (solid, gas)	Not flammable
Vapour pressure	Not applicable.
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	1.89 g/cm ³ (20°C)
Solubility	400 g/l
Log Pow	Not applicable
Log Kow	Not applicable
Viscosity, kinematic	Not applicable
Viscosity, dynamic	3 mPa.s (20°C) Explosive properties Not explosive.
Oxidising properties	No data available. Explosive limits Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity.

10.1. Reactivity

Loss of water of crystallization when heated.

10.2. Chemical stability

Stable under normal conditions of handling and storage.

10.3. Possibility of hazardous reactions Not established.



IRON SULPHATE

Safety Data Sheet

19/08/2014 In compliance with Regulation (EC)1907/2006(REACH) Date of issue: 24/01/2010 Revision date:

10.4. Conditions to avoid

Avoid direct sunlight and heat.

10.5. Incompatible materials No information available

10.6. Hazardous decomposition products

None Known

SECTION 11: Toxicological information.

11.1. Information on toxicological effects

Acute toxicity LD50, oral:	1096 mg/kg (rat; OECD 423) NOAEL: 274 mg/kg/d (rat; OECD 422) > 2000 mg/kg (rat; OECD 202) No information available.
LD50, dermal:	
LC50, inhalation: Skin	Causes skin and mucous membrane irritation (OECD 404)
corrosion/irritation Serious eye	Irritating (OECD 405)
damage/irritation Respiratory or skin	No information available.
sensitisation Germ cell mutagenicity	No information available.
Carcinogenicity Reproductive	No information available.
toxicity	No information available.
STOT – single exposure	No specific target organic toxicity available according to EC Regulation 1272/2008.
Aspiration hazard	Not applicable

SECTION 12: Ecological information.



IRON SULPHATE

Safety Data Sheet

In compliance with Regulation (EC)1907/2006(REACH)

Date of issue: 24/01/2010 Revision date: 19/08/2014

12.1. Toxicity

Data are not experimentally disclosed. The Fe^{2+} ion is not stable under standard test conditions, it oxidizes to the Fe^{3+} ion. Insoluble Iron(III)-hydroxide $Fe(OH)_3$ are formed at a high rate from the Fe^{3+} salts, thus withdrawing the Fe^{2+} from the testing system. Iron is an important substance in biological processes, the iron homeostasis is strictly controlled. This shows that iron is not toxic for the aquatic environment.

12.2. Persistence and degradability

Method is not applicable for inorganic substances

12.3.

Bioaccumulative potential

No bioaccumulation
expected

12.4. Mobility in soil

The product is not mobile in the soil

12.5. Results of PBT and vPvB assessment

Inorganic substance: does not comply with the criteria for the classification as PBT or vPvB.

12.6. Other adverse effects

Iron sulfate hydrolyses forming iron hydrate and diluted sulfuric acid. Both are ecologically harmless.

SECTION 13: Disposal considerations.

13.1. Waste treatment methods

Waste disposal recommendations:

Dispose of according to official national and local regulations

Dispose of according to official local regulations

SECTION 14: Transport information.

14.1. UN number

The product is not covered by international regulation on transport of dangerous goods (IMDG, IATA, ADR/RID).



IRON SULPHATE

Safety Data Sheet

In compliance with Regulation (EC)1907/2006(REACH)

Date of issue: 24/01/2010 Revision date: 19/08/2014

14.2. UN proper shipping name

Not classified for transportation.

14.3. Transport hazard class(es) Not

classified for transportation.

14.4. Packing group

Not classified for transportation.

14.5. Environmental hazards

Other information: No environmental hazards known with this product.

14.6. Special precautions for user Not

classified for transportation.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information.

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

15.1.1. EU Regulations

EC SVHC-List: This product does not contain a substance in the candidate list for substances of very high concern (REACH Regulation (EC) 1907/2006, Article 57)

15.1.2. National Regulations

Ensure all national/local regulations are observed.



IRON SULPHATE

Safety Data Sheet

In compliance with Regulation (EC)1907/2006(REACH)
Date of issue: 24/01/2010 Revision date: 19/08/2014

15.2. Chemical Safety Assessment.

A Chemical Safety Assessment has been carried out for this product

SECTION 16: Other information.

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.



IRON SULPHATE
Safety Data Sheet

SDS Ref:- 19-08-2014

10