

SAFETY DATA SHEET

according to Regulation (EU) No. 453/2010

Electrolyte F21

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

1.1. Product identifier

Product code None.

Synonyms None.

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

Use of the Substance/Preparation Deplating electrolyte - for checking device in electroplating industry

1.3. Details of the supplier of the safety data sheet

Company/Undertaking Identification HELMUT FISCHER AG
Moosmattstrasse 1 P.O. Box
CH-6331 Hünenberg
Switzerland

Tel. +41 (0)41 785 08 15 (8-17h)
info@helmutfischer.com / www.helmutfischer.com

1.4. Emergency telephone number STIZ (Tox-Zentrum) CH-Zürich :
145 / +41 44 251 51 51 [24h/7]]

Revision Date 01.08.2011

Version 1

2. Hazards identification

2.1. Classification of the substance or mixture Serious eye damage/eye irritation, Cat. 1
Hazardous to the aquatic environment, chronic, Cat. 1

2.2. Label elements



Signal Word
Hazard Statements

Precautionary statements

DANGER!

H318: Causes serious eye damage.

H410: Very toxic to aquatic life with long lasting effects.

P273: Avoid release to the environment.

P280c: Wear protective gloves/ eye protection/ face protection.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310: Immediately call a POISON CENTER or doctor/ physician.

P391: Collect spillage.

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

Additional advice

None.

GHS product identifier

Zinc sulfate, CAS-No. 7446-20-0

Classification and labelling according to Directive 67/548/EEC:



Xi - Irritant.

N - Dangerous for the environment.

R-phrase(s)

R36: Irritating to eyes.

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrase(s)

S2: Keep out of the reach of children.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S29/35: Do not empty into drains; dispose of this material and its container in a safe way.

Hazardous components which must be listed on the label

Zinc sulfate, CAS-No. 7446-20-0, EC-No. 231-793-3

2.3. Other hazards

No information available.

3. Composition/information on ingredients

Chemical characterization

Aqueous solution; contains inorganic salts.

Components		Health hazards	EC-Symbol(s) R-phrases	CAS	REACH No.
Zinc sulfate	5% - 10%	Acute Tox. 4 H302, Eye Dam. 1 H318, Aquatic Chronic 1 H410	Xn,N; R-22- 41-50/53	7446-20-0	

For the full text of the phrases mentioned in this Section, see Section 16.

Hazardous impurities

None known.

4. First aid measures

4.1. Description of first aid measures**Inhalation**

Move to fresh air. In the case of inhalation of aerosol/mist consult a physician if necessary.

Skin contact

Wash with water and soap as a precaution.

Eye contact

Rinse thoroughly with plenty of water, also under the eyelids. If eye irritation persists, consult a specialist.

Ingestion

Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice.

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

The product contains no substances known to be hazardous to health in concentrations which need to be taken into account.

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

None known.

5. Firefighting measures

5.1. Extinguishing media**Suitable extinguishing media**

Water spray mist or foam.

Extinguishing media which must not be used for safety reasons

No extinguishing agent constraints

5.2. Special hazards arising from the substance or mixture

The product is not flammable.

5.3. Advice for firefighters

Special protective equipment for firefighters	Standard procedure for chemical fires.
Specific methods	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water mist may be used to cool closed containers.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel	No special measures required. Use personal protective equipment.
Advice for emergency responders	Handle in accordance with good industrial hygiene and safety practice.

6.2. Environmental precautions Prevent product from entering drains.

6.3. Methods and material for containment and cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable and closed containers for disposal.

6.4. Reference to other sections See chapter 8 and 13.

7. Handling and storage

7.1. Precautions for safe handling No special technical protective measures required.

7.2. Conditions for safe storage, including any incompatibilities Store at room temperature in the original container.

7.3. Specific end use(s) No information available.

8. Exposure controls/personal protection

8.1. Control parameters

EU None.

Exposure limit(s) No data is available on the product itself.

8.2. Exposure controls

Occupational exposure controls Handle in accordance with good industrial hygiene and safety practice. General industrial hygiene practice. Keep away from food and drink.

Personal protection equipment

Respiratory protection	No special protective equipment required.
Hand protection	Gloves made of latex. Protective gloves complying with EN 374. Break through time: 1 h.
Eye protection	Avoid contact with eyes. Safety glasses with side-shields conforming to EN 166. Eye wash bottle with pure water.
Skin and body protection	Long sleeved clothing.
Thermal hazards	Do not heat the product.
Environmental exposure controls	No special measures required.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form	Aqueous solution.
Colour	Colourless.
Odour	None.
Odour Threshold	No information available.
pH:	7
Melting point/range:	No information available.
Boiling point/range:	No information available.
Flash point:	does not flash
Evaporation Rate:	No information available.
Flammability:	No information available.
Explosion limits:	No information available.
Vapour pressure:	No information available.
Vapor density:	No information available.
Relative density:	1.1 g/cm ³
Water solubility:	completely miscible
Partition coefficient (n-octanol/water):	No information available.
Autoignition temperature:	No information available.
Decomposition temperature:	No information available.
Viscosity:	No information available.
Combustion/explosion hazards:	not hazardous
Oxidizing properties:	None

9.2. Other information

10. Stability and reactivity

10.1. Reactivity	No hazards to be specially mentioned.
10.2. Chemical stability	No decomposition if used as directed.

10.3. Possibility of hazardous reactions	No hazards to be specially mentioned.
10.4. Conditions to avoid	Vapours in contact with fire or red-hot surfaces may form decomposition products with highly irritating and warning effects.
10.5. Incompatible materials	Incompatible with oxidizing agents.
10.6. Hazardous decomposition products	None under normal use.

11. Toxicological information

11.1. Information on toxicological effects

Acute toxicity	No data is available on the product itself. Zinc sulfate (CAS 7446-20-0) LD50/oral/rat = 2949 mg/kg.
Skin corrosion/irritation	May cause skin irritation with susceptible persons.
Serious eye damage/eye irritation	Risk of serious damage to eyes.
Respiratory / Skin Sensitisation	None.
Carcinogenicity	Contains no ingredient listed as a carcinogen.
Germ cell mutagenicity	Contains no ingredient listed as a mutagen.
Reproductive toxicity	Contains no ingredient listed as toxic to reproduction.
Specific target organ toxicity (single exposure)	No data available.
Specific target organ toxicity (repeated exposure)	No data available.
Aspiration hazard	No aspiration toxicity classification.
Human experience	No data is available on the product itself.

12. Ecological information

12.1. Toxicity	No data is available on the product itself.
12.2. Persistence and degradability	No data is available on the product itself.
12.3. Bioaccumulative potential	No data is available on the product itself.
12.4. Mobility in soil	No data is available on the product itself.

12.5. Results of PBT and vPvB assessment

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

12.6. Other adverse effects

highly water contaminating (self estimation).

13. Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products

Do not empty into drains. Do not put residues of product into household waste. It should be given in the original package to the official waste disposal authorities. European Waste catalogue code (EWC-code): 16 10 01.

Contaminated packaging

Rinse empty containers with water and use the rinse water to prepare the working solution. Completely emptied packaging disposed of with household waste. Partially empty containers back to the point of sale or transfer of a collection site for hazardous waste.

14. Transport information

ADR/RID

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc sulfate)
UN No 3082.
Class 9.
Packing group III.
ADR/RID-Labels 9+ENV.
Classification code M6.
Risk No. 90.
Limited quantity 5 L.
Tunnel code E

IMO

Proper shipping name Environmentally hazardous substance, liquid, n.o.s. (Zinc sulfate)
UN No 3082.
Class 9.
Packing group III.
ADR/RID-Labels 9+ENV.
Limited quantity 5 L.
EmS F-A, S-F.
Marine Pollutant no

ICAO

Proper shipping name Environmentally hazardous substance, liquid, n.o.s. (Zinc sulfate)
UN No 3082.
Class 9.
Packing group III.
Packing instruction (passenger aircraft): 964 (450 L).
Packing instruction (LQ): Y964 (30 kg G).
Packing instruction (cargo aircraft): 964 (450 L).

Inland navigation ADN	Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Zinc sulfate) UN No 3082. Class 9. Packing group III. ADN danger 9+N2+F.
Further Information	None.

15. Regulatory information

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

Regulatory Information	The product is classified according to Regulation (EC) No. 1272/2008 (CLP).
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15.2. Chemical safety assessment	Not required.
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16. Other information

Revision Note	None.
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Key or legend to abbreviations and acronyms	CLP: Classification according to Regulation (EC) No. 1272/2008 (GHS/CLP) VOC: Volatile organic compounds (VOC) content
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Key literature references and sources for data	Information taken from reference works and the literature.
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Classification procedure	Calculation method.
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Text of H phrases mentioned in Section 3	H302: Harmful if swallowed. H318: Causes serious eye damage. H410: Very toxic to aquatic life with long lasting effects.
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Text of R phrases mentioned in Section 3	R22: Harmful if swallowed. R41: Risk of serious damage to eyes. R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
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Training advice	For further information, refer to the product technical data sheet.
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Further information	Take notice of the directions of use. SZID 326113 [CH]
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Instructions for use	For industrial application only. Keep away from children.
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Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release. It is not to be considered a warranty or quality specification.
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