

# SAFETY DATA SHEET

according to Regulation (EU) No. 453/2010

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## Electrolyte F22

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### 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

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### 2. Hazards identification

**2.1. Classification of the substance or mixture** Acute toxicity, oral, Cat. 4  
Skin Sensitisation, Cat. 1  
Hazardous to the aquatic environment, chronic, Cat. 1  
Dispose of contents/container according to local and national regulations.

## 2.2. Label elements



**Signal Word**  
**Hazard Statements**

WARNING!

H302: Harmful if swallowed.

H317: May cause an allergic skin reaction.

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

P261: Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P264a: Wash skin thoroughly after handling.

P273: Avoid release to the environment.

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

P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.

**Precautionary statements**

**Additional advice**

Dispose of contents/container according to local and national regulations.

**GHS product identifier**

Chlornickel, CAS-No. 7791-20-0

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



T - Toxic.

N - Dangerous for the environment.

**R-phrase(s)**

R25: Toxic if swallowed.

R43: May cause sensitisation by skin contact.

R50/53: Very 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.

S24: Avoid contact with skin.

S37: Wear suitable gloves.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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**

Nickel dichloride, CAS-No. 7791-20-0, EC-No. 231-743-0

**2.3. Other hazards**

No information available.

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### 3. Composition/information on ingredients

#### Chemical characterization

Aqueous solution; contains inorganic salts.

Components		Health hazards	EC-Symbol(s) R-phrase(s)	CAS	REACH No.
Chlornickel	25% - 50%	Acute Tox. 3 H301, Skin Sens. 1 H317, Aquatic Chronic 1 H410	T,N; R-25-43- 50/53	7791-20-0	

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

#### Hazardous impurities

None known.

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### 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 off immediately with plenty of water.

##### Eye contact

Rinse immediately 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

None known.

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

None known.

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### 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

<b>Special protective equipment for firefighters</b>	Standard procedure for chemical fires.
<b>Specific methods</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Do not use a solid water stream as it may scatter and spread fire.

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## **6. Accidental release measures**

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

<b>Advice for non-emergency personnel</b>	Keep people away from and upwind of spill/leak. Use personal protective equipment.
<b>Advice for emergency responders</b>	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.

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## **7. Handling and storage**

<b>7.1. Precautions for safe handling</b>	Avoid exposure - obtain special instructions before use. Wear personal protective equipment.
<b>7.2. Conditions for safe storage, including any incompatibilities</b>	Store at room temperature in the original container. Keep out of reach of children.
<b>7.3. Specific end use(s)</b>	Use only in accordance with our recommendations.

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## **8. Exposure controls/personal protection**

### **8.1. Control parameters**

<b>EU</b>	None.
<b>Exposure limit(s)</b>	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. Avoid contact with skin, eyes and clothing. Keep away from food and drink.

## Personal protection equipment

<b>Respiratory protection</b>	No personal respiratory protective equipment normally required. In the case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit. Suitable mask with particle filter P3 (European Norm 143)
<b>Hand protection</b>	Protective gloves complying with EN 374. Nitrile rubber. Break through time: > 2 h.
<b>Eye protection</b>	Safety glasses with side-shields conforming to EN 166. Eye wash bottle with pure water.
<b>Skin and body protection</b>	Long sleeved clothing.
<b>Thermal hazards</b>	Do not heat the product.
<b>Environmental exposure controls</b>	Prevent leaks and prevent soil / water pollution caused by leaks.

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## 9. Physical and chemical properties

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

<b>Form</b>	Aqueous solution.
<b>Colour</b>	Colourless.
<b>Odour</b>	None.
<b>Odour Threshold</b>	No information available.
<b>pH:</b>	2.9
<b>Melting point/range:</b>	No information available.
<b>Boiling point/range:</b>	No information available.
<b>Flash point:</b>	does not flash
<b>Evaporation Rate:</b>	No information available.
<b>Flammability:</b>	No information available.
<b>Explosion limits:</b>	No information available.
<b>Vapour pressure:</b>	No information available.
<b>Vapor density:</b>	No information available.
<b>Relative density:</b>	1.1 g/cm <sup>3</sup>
<b>Water solubility:</b>	No information available.
<b>Partition coefficient (n-octanol/water):</b>	No information available.
<b>Autoignition temperature:</b>	No information available.
<b>Decomposition temperature:</b>	No information available.
<b>Viscosity:</b>	No information available.
<b>Combustion/explosion hazards:</b>	not hazardous
<b>Oxidizing properties:</b>	None

### 9.2. Other information

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## **10. Stability and reactivity**

<b>10.1. Reactivity</b>	No hazards to be specially mentioned.
<b>10.2. Chemical stability</b>	Stable at normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	Exothermic reaction with strong acids.
<b>10.4. Conditions to avoid</b>	Heating in air.
<b>10.5. Incompatible materials</b>	Incompatible with strong acids and oxidizing agents.
<b>10.6. Hazardous decomposition products</b>	None reasonably foreseeable.

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## **11. Toxicological information**

### **11.1. Information on toxicological effects**

<b>Acute toxicity</b>	No data is available on the product itself.
<b>Skin corrosion/irritation</b>	May cause skin irritation with susceptible persons.
<b>Serious eye damage/eye irritation</b>	May cause eye irritation with susceptible persons.
<b>Respiratory / Skin Sensitisation</b>	None.
<b>Carcinogenicity</b>	Contains no ingredient listed as a carcinogen.
<b>Germ cell mutagenicity</b>	Contains no ingredient listed as a mutagen.
<b>Reproductive toxicity</b>	Contains no ingredient listed as toxic to reproduction.
<b>Specific target organ toxicity (single exposure)</b>	No data available.
<b>Specific target organ toxicity (repeated exposure)</b>	No data available.
<b>Aspiration hazard</b>	No aspiration toxicity classification.
<b>Human experience</b>	No data is available on the product itself.

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## **12. Ecological information**

<b>12.1. Toxicity</b>	No data is available on the product itself.
<b>12.2. Persistence and degradability</b>	No data is available on the product itself.
<b>12.3. Bioaccumulative potential</b>	No data is available on the product itself.

<b>12.4. Mobility in soil</b>	No data is available on the product itself.
<b>12.5. Results of PBT and vPvB assessment</b>	This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).
<b>12.6. Other adverse effects</b>	highly water contaminating (self estimation).

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## **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. EWC waste disposal No: 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.

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## **14. Transport information**

### **ADR/RID**

Proper shipping name TOXIC LIQUID, INORGANIC, N.O.S. (Nickel dichloride)  
 UN No 3287.  
 Class 6.1.  
 Packing group III.  
 ADR/RID-Labels 6.1+ENV.  
 Classification code T4.  
 Risk No. 60.  
 Limited quantity 5 L.  
 Tunnel code E

### **IMO**

Proper shipping name Toxic liquid, inorganic, n.o.s. (Nickel dichloride)  
 UN No 3287.  
 Class 6.1.  
 Packing group III.  
 ADR/RID-Labels 6.1+ENV.  
 Limited quantity 5 L.  
 EmS F-A, S-A.  
 Marine Pollutant no



<b>ICAO</b>	Proper shipping name Toxic liquid, inorganic, n.o.s. (Nickel dichloride) UN No 3287. Class 6.1. Packing group III. Packing instruction (passenger aircraft): 655 (60 L). Packing instruction (LQ): Y642 (2 L). Packing instruction (cargo aircraft): 663 (220 L).
<b>Inland navigation ADN</b>	Proper shipping name TOXIC LIQUID, INORGANIC, N.O.S. (Nickel dichloride) UN No 3287. Class 6.1. Packing group III. ADN danger 6.1+(N1, N2, N3, CMR, F oder S).
<b>Further Information</b>	None.

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## 15. Regulatory information

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

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

<b>Revision Note</b>	None.
<b>Key or legend to abbreviations and acronyms</b>	CLP: Classification according to Regulation (EC) No. 1272/2008 (GHS/CLP) VOC: Volatile organic compounds (VOC) content
<b>Key literature references and sources for data</b>	Information taken from reference works and the literature.
<b>Classification procedure</b>	Calculation method.
<b>Text of H phrases mentioned in Section 3</b>	H301: Toxic if swallowed. H317: May cause an allergic skin reaction. H410: Very toxic to aquatic life with long lasting effects.
<b>Text of R phrases mentioned in Section 3</b>	R25: Toxic if swallowed. R43: May cause sensitisation by skin contact. R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
<b>Training advice</b>	For further information, refer to the product technical data sheet.
<b>Further information</b>	Take notice of the directions of use. SZID 326114 [CH]



**Instructions for use**

For industrial application only. Keep away from children.

**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.