

# SAFETY DATA SHEET

according to Regulation (EU) No. 453/2010

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## Electrolyte F9

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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**

01.06.2012

**Version**

2

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## 2. Hazards identification

### 2.1. Classification of the substance or mixture

**Classification according to Regulation (EC) No. 1272/2008 (GHS/CLP)**

Skin corrosion/irritation, Cat. 1A, H314  
Dispose of contents/container according to local and national regulations.

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

C; R35

**Additional information**

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

### 2.2. Label elements



**Signal Word**

Danger

**Hazard Statements**

H314: Causes severe skin burns and eye damage.

**Precautionary statements**

P260: Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

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

P303+P361+P353: IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.

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

**Additional advice**

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

**GHS product identifier**

Sodium hydroxide, CAS-No. 1310-73-2, EC-No. 215-185-5

**Labelling according to Directives 67/548/EEC or 1999/45/EC**



C - Corrosive.

**R-phrases(s)**

R35: Causes severe burns.

**S-phrases(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.

S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.

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 component(s) which must be listed on the label**

Sodium hydroxide, CAS-No. 1310-73-2, EC-No. 215-185-5

### 2.3. Other hazards

No information available.

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## 3. Composition/information on ingredients

### Chemical characterization

alkaline aqueous solution.

Components		CLP Classification	DSD/DPD Classification	CAS	REACH No.
Sodium hydroxide	10% - 15%	Skin Corr. 1A H314 [CSk1A: C ≥ 5 % ; CSk1B: 2 % ≤ C < 5 % ; CSk2: 0,5 % ≤ C < 2 % ; CEy2: 0,5 % ≤ C < 2 %]	C; R-35 [C ≥ 5 % \ C; R-35 ; 2 % ≤ C < 5 % \ C; R-34 ; 0,5 % ≤ C < 2 % \ Xi; R-36/38]	1310-73-2	

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. Consult a physician after significant exposure.

#### Skin contact

Wash off with polyethylene glycol and afterwards with plenty of water.

#### Eye contact

Rinse thoroughly with plenty of water, also under the eyelids. Protect unharmed eye. Consult an ophthalmologist.

#### Ingestion

Clean mouth with water and drink afterwards plenty of water. Do not induce vomiting without medical advice. Consult a physician for severe cases.

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

Take off all contaminated clothing immediately.

### 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. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

### **5.3. Advice for firefighters**

**Special protective equipment for firefighters** Standard procedure for chemical fires. Wear self contained breathing apparatus for fire fighting if necessary.

**Specific methods** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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## **6. Accidental release measures**

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

**Advice for non-emergency personnel** Ensure adequate ventilation. Do not breathe vapours/aerosol.

**Advice for emergency responders** Use personal protective equipment.

**6.2. Environmental precautions** May change pH of waters. Do not empty into 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). After cleaning, flush away traces with water. 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**

**7.1. Precautions for safe handling** Prepare the working solution as given on the label(s) and/or the user instructions.

**7.2. Conditions for safe storage, including any incompatibilities** Keep tightly closed in a dry and cool place.

**7.3. Specific end use(s)** Use only in accordance with our recommendations.

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## 8. Exposure controls/personal protection

### 8.1. Control parameters

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

**Sodium hydroxide (CAS 1310-73-2)**  
United Kingdom - Workplace  
Exposure Limits (WELs) - STELs 2 mg/m<sup>3</sup> STEL

### 8.2. Exposure controls

**Occupational exposure controls** General industrial hygiene practice. Handle in accordance with good industrial hygiene and safety practice.

#### Personal protection equipment

*Respiratory protection* In the case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit. Respirator with ABEK2-P3 filter.

*Hand protection* Protective gloves complying with EN 374. Nitrile rubber. Break through time: > 1 h.

*Eye protection* Safety glasses with side-shields conforming to EN 166. Eye wash bottle with pure water.

*Skin and body protection* Chemical resistant apron. Long sleeved clothing.

**Thermal hazards** Do not heat the product.

**Environmental exposure controls** 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

**Form** Liquid.  
**Colour** Colourless.  
**Odour** None.  
**Odour Threshold** No information available.

**pH:** 13  
**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:** 1.15 g/cm<sup>3</sup>  
**Water solubility:** 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

<b>General Product Characteristics</b>	No information available.
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## 10. Stability and reactivity

<b>10.1. Reactivity</b>	has a corrosive effect.
<b>10.2. Chemical stability</b>	Stable at normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	No hazards to be specially mentioned.
<b>10.4. Conditions to avoid</b>	Heating in air.
<b>10.5. Incompatible materials</b>	Gives off hydrogen by reaction with metals.
<b>10.6. Hazardous decomposition products</b>	Hydrogen, by reaction with metals.

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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>Sodium hydroxide (CAS 1310-73-2)</b> Dermal LD50 Rabbit 1350 mg/kg
<b>Skin corrosion/irritation</b>	Causes burns.
<b>Serious eye damage/eye irritation</b>	Risk of serious damage to eyes.
<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>	Did not show teratogenic effects in animal experiments.
<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 information on ecology is available.
<b>Sodium hydroxide (CAS 1310-73-2)</b>	
Ecotoxicity - Freshwater Fish - Acute Toxicity Data	96 h LC50 Oncorhynchus mykiss: 45.4 mg/L [static]
<b>12.2. Persistence and degradability</b>	No data available.
<b>12.3. Bioaccumulative potential</b>	No data available.
<b>12.4. Mobility in soil</b>	No data available.
<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>	slightly water contaminating.

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## **13. Disposal considerations**

### **13.1. Waste treatment methods**

<b>Waste from residues / unused products</b>	Do not empty into drains or dispose with household waste. Taking into account local regulations the product may be disposed of as waste water after neutralisation. EWC waste disposal No: 11 01 06.
<b>Contaminated packaging</b>	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

<b>ADR/RID</b>	Proper shipping name SODIUM HYDROXIDE SOLUTION UN No 1824. Class 8. Packing group II. ADR/RID-Labels 8. Classification code C5. Risk No. 80. Limited quantity 1 L. Tunnel code E
<b>IMO</b>	Proper shipping name Sodium hydroxide solution UN No 1824. Class 8. Packing group II. ADR/RID-Labels 8. Limited quantity 1 L. EmS F-A, S-B. Marine Pollutant no
<b>ICAO</b>	Proper shipping name Sodium hydroxide solution UN No 1824. Class 8. Packing group II. Packing instruction (passenger aircraft): 851 (1 L). Packing instruction (LQ): Y840 (0.5 L). Packing instruction (cargo aircraft): 855 (30 L).
<b>Inland navigation ADN</b>	Proper shipping name SODIUM HYDROXIDE SOLUTION UN No 1824. Class 8. Packing group II. ADN danger 8+N3.
<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). Special rules on packaging. - supplied to the general public: Child resistant fastenings (EN 862). Tactile warning of danger (EN/ISO 11683).
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#### Sodium hydroxide (CAS 1310-73-2)



EU - Cosmetics (76/768/EEC) - Annex III Part 1 - Conditions of Use and Warnings Which Must Be Printed on the Label	Contains alkali. Avoid contact with eyes. Can cause blindness. Keep out of reach of children. (Nail cuticle solvent) Contains alkali. Avoid contact with eyes. Can cause blindness. Keep out of reach of children. (Hair straightener, general use) For professional use only. Avoid contact with eyes. Can cause blindness. (Hair straightener, professional use) Keep out of reach of children. Avoid contact with eyes. (pH adjuster, depilatories)
EU - Cosmetics (1223/2009) - Annex III - Conditions of Use and Warnings	Contains alkali. Avoid contact with eyes. Can cause blindness. Keep out of reach of children. (Nail cuticle solvent) Contains alkali. Avoid contact with eyes. Can cause blindness. Keep out of reach of children. (Hair straightener, general use) For professional use only. Avoid contact with eyes. Can cause blindness. (Hair straightener, professional use) Keep out of reach of children. Avoid contact with eyes. (pH adjuster for depilatories)
EU - Biocides (1451/2007) - Existing Active Substances	Present
EU - REACH (1907/2006) - List of Registered Intermediates	Present
EU - REACH (1907/2006) - List of Registered Substances	Present
<b>15.2. Chemical safety assessment</b>	Not required.

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## **16. Other information**

<b>Revision Note</b>	Safety datasheet sections which have been updated: 14.
<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>Full text of phrases referred to under sections 2 and 3</b>	H314: Causes severe skin burns and eye damage. R35: Causes severe burns.
<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 323631[CH]
<b>Instructions for use</b>	See product description. For industrial application only. Keep away from children.
<b>Disclaimer</b>	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.