### SAFETY DATA SHEET

according to Regulation (EU) No. 453/2010

### **Electrolyte F17**

# 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		

### 2. Hazards identification

#### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 (GHS/CLP)	Serious eye damage/eye irritation, Cat. 2, H319 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; R34	
Additional information	For the full text of the phrases mentioned in this Section, see Section 16.	
2.2. Label elements		
Signal Word Hazard Statements Precautionary statements	Danger H314: Causes severe skin burns and eye damage. 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-phrase(s)	R34: Causes burns.	
S-phrase(s)	<ul> <li>S2: Keep out of the reach of children.</li> <li>S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.</li> <li>S36/37/39: Wear suitable protective clothing, gloves and eye / face protection.</li> <li>S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).</li> <li>S29/35: Do not empty into drains; dispose of this material and its container in a safe way.</li> </ul>	

Hazardous component(s) which	None.
Electrolyte F17	Print Date 12.06.2012

2.3. Other hazards

No information available.

#### 3. Composition/information on ingredients

**Chemical characterization** 

alkaline aqueous solution.

Components		CLP Classification	DSD/DPD Classification	CAS	REACH No.
Sodium hydroxide	0.1% - 1%	Skin Corr. 1A H314 [CSk1A: C ≥ 5 %   CSk1B: 2 % ≤ C < 5 %   CSk2: 0,5 % ≤ C < 2 %   CEy2: 0,5 % ≤ C < 2 %]	<= C < 5 % \ C; R-34   0.5	1310-73-2	

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. 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.

#### 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.	

#### 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.

### 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.

#### 8. Exposure controls/personal protection

#### 8.1. Control parameters

Exposure limit(s)	No data is available on the product itself.
<b>Sodium hydroxide (CAS 1310-73-2</b> ) United Kingdom - Workplace Exposure Limits (WELs) - STELs	2 mg/m3 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.

### 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:	12.5
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:	1.06 g/cm3
Water solubility:	No information available.

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

General Product Characteristics No inform

No information available.

### 10. Stability and reactivity

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

### 11. Toxicological information

#### 11.1. Information on toxicological effects

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

## 13. Disposal considerations

13.1. Waste treatment methods	
Waste from residues / unused products	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.
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.

ADR/RID	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
ΙΜΟ	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
ICAO	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).
Inland navigation ADN	Proper shipping name SODIUM HYDROXIDE SOLUTION UN No 1824. Class 8. Packing group II. ADN danger 8+N3.
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).
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
15.2. Chemical safety assessment	Not required.

16. Other information	
Revision Note	Safety datasheet sections which have been updated: 14.
Key or legend to abbreviations and acronyms	CLP: Classification according to Regulation (EC) No. 1272/2008 (GHS/CLP) VOC: Volatile organic compounds (VOC) content
Key literature references and sources for data	Information taken from reference works and the literature.
Classification procedure	Calculation method.
Full text of phrases referred to under sections 2 and 3	H314: Causes severe skin burns and eye damage. H319: Causes serious eye irritation.
	R34: Causes burns.
Training advice	For further information, refer to the product technical data sheet.
Further information	Take notice of the directions of use. SZID 323636[CH]
Instructions for use	See product description. 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.