

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

### 1.1 Product identifier

Trade name: Electrolyte AE 3

UFI: K800-P0U8-W008-T75K

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

General use: Electrolytic/electrochemical metal marking for chem. Nickel

### 1.3 Details of the supplier of the safety data sheet

Company name: Schilling Marking Systems GmbH

Street/POB-No.: In Grubenäcker 1

Postal Code, city: DE-78532 Tuttlingen

WWW: www.schilling-marking.de

E-mail: info@schilling-marking.de

Telephone: +49 (0)7461 9472-0

Telefax: +49 (0)7461 9472-28

Department responsible for information:

Frau Bianca Schilling,

Telephone: +49 (0)7461 9472-0

Email: info@schilling-marking.de

### 1.4 Emergency telephone number

GIZ-Nord, Germany Telephone: +49 (0)551-19240

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Eye Dam. 1; H318 Causes serious eye damage.

### 2.2 Label elements

#### Labelling (CLP)



Signal word: **Danger**

Hazard statements: H318 Causes serious eye damage.

Precautionary statements: P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P280 Wear protective gloves/protective clothing/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/doctor.

#### Special labelling

Text for labelling: Contains Lactic acid.

### 2.3 Other hazards

Electrolytic vapours may form during the electrochemical process.  
May be harmful if inhaled.  
A corrosive effect cannot be ruled out because of the pH value.

Endocrine disrupting properties, Results of PBT and vPvB assessment:  
No data available

## SECTION 3: Composition/information on ingredients

3.1 Substances: not applicable

### 3.2 Mixtures

Chemical characterisation: Mixture of water/mineral salt and complexing agent

Hazardous ingredients:

Identifiers	Designation Classification	Content
EC No. 201-196-2 CAS 79-33-4	Lactic acid Skin Corr. 1C; H314. Eye Dam. 1; H318. (EUH071).	1 - 5 %

Full text of H- and EUH-statements: see section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

General information: If medical advice is needed, have product container or label at hand. Take off contaminated clothing and wash it before reuse.

In case of inhalation: Provide fresh air. In case of respiratory difficulties seek medical attention.

Following skin contact: Remove residues with water.  
In case of skin reactions, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After swallowing: Rinse mouth immediately and drink plenty of water. If you feel unwell, seek medical advice.  
Do not induce vomiting.  
Never give anything by mouth to an unconscious person.

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

Causes serious eye damage.

### 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: Product is non-combustible. Extinguishing materials should therefore be selected according to surroundings.

Extinguishing media which must not be used for safety reasons:  
Full water jet

### 5.2 Special hazards arising from the substance or mixture

In the event of a fire, the following may be produced when the water evaporates: Carbon monoxide and carbon dioxide.

### 5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained breathing apparatus. Wear full protective suit.

Additional information:

Do not allow fire water to penetrate into surface or ground water.

## SECTION 6: Accidental release measures

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

Provide adequate ventilation. Do not breathe vapour/aerosol.

Avoid contact with skin and eyes. Keep unprotected people away.

Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse.

### 6.2 Environmental precautions

Do not allow to penetrate into soil, waterbodies or drains.

### 6.3 Methods and material for containment and cleaning up

Soak up with absorbent materials such as sand, siliceous earth, acid- or universal binder. Store in special closed containers and dispose of according to ordinance. Final cleaning.

Additional information:

Special danger of slipping by leaking/spilling product.

### 6.4 Reference to other sections

Refer additionally to section 8 and 13.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advices on safe handling:

Provide adequate ventilation, and local exhaust as needed.

Avoid contact with skin and eyes. Do not breathe vapour/aerosol. Do not eat, drink or smoke when using this product.

Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse. Have eye wash bottle or eye rinse ready at work place.

Do not mix with other chemicals.

### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container tightly closed and dry.

Store at room temperature.

Hints on joint storage:

Keep away from food, drink and animal feedingstuffs.

Storage class:

12 = Non-combustible liquids

### 7.3 Specific end use(s)

No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Additional information:

Contains no substances with occupational exposure limit values.

### 8.2 Exposure controls

Provide good ventilation and/or an exhaust system in the work area.

### Personal protection equipment

#### Occupational exposure controls

Respiratory protection:

If vapours form, use respiratory protection.

Combination filter/Use filter type A-P2 according to EN 14387.

Hand protection:	Protective gloves according to EN 374. Glove material: Nitrile rubber Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
Eye protection:	Tightly sealed goggles according to EN 166.
Body protection:	Wear suitable protective clothing.
General protection and hygiene measures:	Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Take off contaminated clothing and wash it before reuse. Have eye wash bottle or eye rinse ready at work place.

**Environmental exposure controls**

Refer to "6.2 Environmental precautions".

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties**

Physical state at 20 °C and 101.3 kPa	liquid
Colour:	colourless
Odour:	characteristic
Odour threshold:	No data available
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flammability:	No data available
Upper/lower flammability or explosive limits:	No data available
Flash point/flash point range:	not combustible
Decomposition temperature:	No data available
pH:	1,5 - 2,5
Viscosity, kinematic:	No data available
Water solubility:	at 20 °C: completely miscible
Partition coefficient: n-octanol/water:	No data available
Vapour pressure:	No data available
Density:	at 20 °C: 1,03 g/mL
Vapour density:	No data available
Particle characteristics:	Not applicable

**9.2 Other information**

Explosive properties:	No data available
Oxidizing characteristics:	No data available
Auto-ignition temperature:	No data available
Evaporation rate:	No data available
Additional information:	No data available

**SECTION 10: Stability and reactivity****10.1 Reactivity**

Refer to 10.3

**10.2 Chemical stability**

Product is stable under normal storage conditions.

### 10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

### 10.4 Conditions to avoid

Do not mix with other chemicals.

### 10.5 Incompatible materials

Strong acids and alkalis

### 10.6 Hazardous decomposition products

No hazardous decomposition products when regulations for storage and handling are observed.

Thermal decomposition: No data available

## SECTION 11: Toxicological information

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Lack of data.

Acute toxicity (dermal): Lack of data.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Eye Dam. 1; H318 = Causes serious eye damage.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Lack of data.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Lack of data.

Reproductive toxicity: Lack of data.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Lack of data.

Specific target organ toxicity (repeated exposure): Lack of data.

Aspiration hazard: Lack of data.

### 11.2 Information on other hazards

Endocrine disrupting properties: No data available

### Symptoms

After contact with skin: May cause irritations.

After eye contact: Reddening, pain.

## SECTION 12: Ecological information

### 12.1 Toxicity

Water Hazard Class: 1 = slightly hazardous to water

### 12.2 Persistence and degradability

Further details: No data available

### 12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

No data available

**12.6 Endocrine disrupting properties**

No data available

**12.7 Other adverse effects**

General information: Do not allow to enter undiluted resp. in large quantities into surface water or into drains.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods****SECTION 14: Transport information****14.1 UN number or ID number**

ADR/RID, ADN, IMDG, IATA-DGR:

not applicable

**14.2 UN proper shipping name**

ADR/RID, ADN, IMDG, IATA-DGR:

Not restricted

**14.3 Transport hazard class(es)**

ADR/RID, ADN, IMDG, IATA-DGR:

not applicable

**14.4 Packing group**

ADR/RID, ADN, IMDG, IATA-DGR:

not applicable

**14.5 Environmental hazards**

Dangerous for the environment: Substance/mixture is not environmentally hazardous according to the criteria of the UN model regulations.

Marine pollutant - IMDG: no

**14.6 Special precautions for user**

No dangerous good in sense of these transport regulations.

**14.7 Maritime transport in bulk according to IMO instruments**

No data available

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations - Germany**

Storage class: 12 = Non-combustible liquids

Water Hazard Class: 1 = slightly hazardous to water

Information on working limitations:

Observe employment restrictions for young people.

Further regulations, limitations and legal requirements:

No data available

### National regulations - EC member states

Further regulations, limitations and legal requirements:

Use restriction according to REACH annex XVII, no.: 3, 75

### 15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

## SECTION 16: Other information

Wording of the H-phrases under paragraph 2 and 3:

H314 = Causes severe skin burns and eye damage.

H318 = Causes serious eye damage.

EUH071 = Corrosive to the respiratory tract.

Reason of change: General revision

Date of first version: 20.6.2008

Department issuing data sheet: see section 1: Department responsible for information

Abbreviations and acronyms: ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road  
AS/NZS: Australian Standards/New Zealand Standards  
CAS: Chemical Abstracts Service  
CFR: Code of Federal Regulations  
CLP: Classification, Labelling and Packaging  
DMEL: Derived minimal effect level  
DNEL: Derived no-effect level  
EC: European Community  
EN: European Standard  
EQ: Excepted quantities  
EU: European Union  
Eye Dam.: Eye damage  
IATA: International Air Transport Association  
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations  
IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
IMDG Code: International Maritime Dangerous Goods Code  
MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships  
OSHA: Occupational Safety and Health Administration  
PBT: Persistent, bioaccumulative and toxic  
PNEC: Predicted no-effect concentration  
REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals  
RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail  
Skin Corr.: Skin corrosion  
TRGS: Technical Rules for Hazardous Substances  
vPvB: Very persistent and very bioaccumulative

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.