

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

### 1.1 Product identifier

Trade name: Electrolyte AE 7

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

General use Electrolytic marking technology

### 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: 78532 Tuttlingen

Germany

WWW: [www.schilling-marking.de](http://www.schilling-marking.de)

E-mail: [info@schilling-marking.de](mailto:info@schilling-marking.de)

Telephone: +49 (0)7461 9472-17

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Dept. responsible for information:

Herr Andreas Schilling,

Telephone: +49 (0)7461 9472-15, Email: [info@schilling-marking.de](mailto:info@schilling-marking.de)

### 1.4 Emergency telephone number

**Beratungsstelle für Vergiftungserscheinungen, Berlin,**

**Telephone: +49 (0)30 19240**

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Classification according to Directive 67/548/EEC or 1999/45/EC

Sens.; R43 May cause sensitization by skin contact.

### 2.2 Label elements

Labelling (67/548/EEC or 1999/45/EC)



Xi

irritant

R phrase(s): R 43 May cause sensitization by skin contact.

S phrase(s): S 2 Keep out of the reach of children.

S 24 Avoid contact with skin.

S 37 Wear suitable gloves.

Text for labelling Contains Mixture of 5-chlorine-2-methyl-2H-isothiazol-3-on and 2-methylen-2H-isothiazol-3-on (3:1): May produce an allergic reaction.

### 2.3 Other hazards

Electrolytic vapours may form during the electrochemical process.

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**SECTION 3: Composition/ information on ingredients**

3.1 Substances: not applicable

**3.2 Mixtures**

Chemical characterization (preparation):

mixture of water/mineral salt and complexing agent

Hazardous ingredients:

Ingredient	Chemical name	Content	Classification
EINECS 229-347-8 CAS 6484-52-2	Ammonium nitrate	5-10 %	EU: O; R9. CLP: Ox. Sol. 3; H272.
EINECS - CAS 55965-84-9	Mixture of 5-Chloro-2-methyl-2H- isothiazolin-3-one and 2-methyl-2H- isothiazol-3-one (3:1) [EC-No. 247-500-7 + 220-239-6]	0,0015-0,06 %	EU: C; R34. Sens.; R43. N; R50-53. T; R23/24/25. CLP: Acute Tox. 3; H301. Acute Tox. 3; H311. Acute Tox. 3; H331. Skin Corr. 1B; H314. Skin Sens. 1; H317. Aquatic Acute 1; H400. Aquatic Chronic 1; H410.

**SECTION 4: First aid measures****4.1 Description of first aid measures**

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

In case of skin contact: Change contaminated clothing.  
After contact with skin, wash immediately with plenty of 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. In case of troubles or persistent symptoms, consult an ophthalmologist.

After swallowing: Rinse mouth immediately and drink plenty of water.  
If you feel unwell, seek medical advice.**4.2 Most important symptoms and effects, both acute and delayed**

No data available

**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.

**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:  
Chlorine decomposition products (in traces), nitrogen oxides (NOx).**5.3 Advice for firefighters**

Special protective equipment for firefighters:

Wear self-contained breathing apparatus.

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Additional information: Hazchem-Code: -  
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**

Avoid contact with the substance. Provide adequate ventilation.

**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, siliceus earth, acid- or universal binder. Store in special closed containers and dispose of according to ordinance. Final cleaning. Do not allow to dry.

**6.4 Reference to other sections**

Refer additionally to chapter 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 the substance. Do not breathe vapour/aerosol.  
Do not mix with other chemicals.

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

Requirements for storerooms and containers:  
Keep container tightly closed.  
Storage class: 12= Non-combustible liquids

**7.3 Specific end use(s)**

Electrolytic marking technology

**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

Additional information: Contains no substances with occupational exposure limit values.

**8.2 Exposure controls**

**Occupational exposure controls**

Respiratory protection: If vapours form, use respiratory protection.  
Use filter type A-P3 according to EN 14387.  
Hand protection: Protective gloves according to EN 374.  
Glove material: Butyl caoutchouc (butyl rubber)-Breakthrough time: >480 min.  
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:  
Change contaminated clothing.  
Wash hands before breaks and after work.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless
Odour:	characteristic
Flash point / flash point range:	not combustible
Density:	at 20 °C: 1,03 g/mL
pH value:	6,5-7,5
Water solubility:	at 20 °C: fully miscible

### 9.2 Other information

No data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

see 10.3

### 10.2 Chemical stability

Product is stable under normal storage conditions.

### 10.3 Possibility of hazardous reactions

No dangerous reactions are known.

### 10.4 Conditions to avoid

Do not mix with other chemicals.

### 10.5 Incompatible materials

strong acids and alkalis

### 10.6 Hazardous decomposition products

In the event of a fire, the following may be produced when the water evaporates:  
Chlorine decomposition products (in traces), nitrogen oxides (NO<sub>x</sub>).

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Toxicological effects	Acute toxicity (oral): Lack of data. Acute toxicity (dermal): Lack of data. Acute toxicity (inhalative): Lack of data. Skin corrosion/irritation: Lack of data. Eye damage / irritation: Lack of data. Sensitisation to the respiratory tract: Lack of data. Skin sensitisation: Skin Sens. 1; H317. 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.
After eye contact:	May cause irritations.

### General remarks

May cause sensitization by skin contact.

## SECTION 12: Ecological information

### 12.1 Toxicity

Aquatic toxicity:	Information about Mixture of 5-chlorine-2-methyl-2H-isothiazol-3-on and 2-methylen-2H-isothiazol-3-on (3:1) (Biocide): Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Algae toxicity: EC50 Pseudokirchneriella subcapitata: 0,018 mg/L/72h. EC50 Selenastrum capricornutum: 0,025 mg/L/96h. Bacterial toxicity: EC50 Pseudomonas putida: 5,7 mg/L/16h. Daphnia toxicity: EC50 Daphnia magna: 0,12 mg/L/48 h. Fish toxicity: LC50 trout: 0,19 - 0,28 mg/L/96 h.
Water Hazard Class:	1 = slightly hazardous to water

### 12.2. Persistence and degradability

Further details: 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

No data available

## 12.6 Other adverse effects

General information: Do not allow to enter into ground-water, surface water or drains.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

Waste key number 11 01 98\* = Wastes from chemical surface treatment and coating of metals and other materials (eg. galvanic processes, zinc coating processes, pickling processes, etching, phosphatising, alkaline degreasing, anodising)  
\* = Evidence for disposal must be provided.

Recommendation: Special waste. Dispose of waste according to applicable legislation.

#### Contaminated packaging

Waste key number 15 01 02 = Plastic packaging

Recommendation: Dispose of waste according to applicable legislation.  
Handle contaminated packages in the same way as the substance itself.  
Non-contaminated packages may be recycled.

## SECTION 14: Transport information

### 14.1 UN number

not applicable

### 14.2 UN proper shipping name

ADR/RID, IMDG, IATA: Not restricted

### 14.3 Transport hazard class(es)

not applicable

### 14.4 Packing group

not applicable

### 14.5 Environmental hazards

Marine pollutant - IMDG: No

### 14.6 Special precautions for user

No dangerous good in sense of these transport regulations.

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

## SECTION 15: Regulatory information

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

#### National regulations - Great Britain

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**National regulations - Germany**

Storage class: 12= Non-combustible liquids

Water Hazard Class: 1 = slightly hazardous to water

Informations on working limitations:

Observe employment restrictions concerning young persons.

**National regulations - EC member states**

Volatile organic compounds (VOC):

0 % by weight

**National regulations - USA**

Hazard rating systems



NFPA Hazard Rating:

Health: 1 (Slight)

Fire: 0 (Minimal)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 1 (Slight)

Flammability: 0 (Minimal)

Physical Hazard: 0 (Minimal)

Personal Protection: X = Consult your supervisor

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
	X

**15.2 Chemical Safety Assessment**

No data available

**SECTION 16: Other information****Further remarks**

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

R 8 = Contact with combustible material may cause fire.

R 9 = Explosive when mixed with combustible material.

R 23/24/25 = Toxic by inhalation, in contact with skin and if swallowed.

R 34 = Causes burns.

R 43 = May cause sensitization by skin contact.

R 50/53 = Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Reason of change: General revision

**Group that issues data sheet**

Contact person: see chapter 1, department responsible for information.

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.