

Electrolyte AE 36

Article number 22.036

Page:

1 of 7

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Trade name: Electrolyte AE 36

1.2 Relevant identified uses of the substance or mixture and uses advised againstGeneral use: Electrolytic/electro-chem metal marking for steels non-corrosive
For commercial user only**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
GermanyWWW: www.schilling-marking.deE-mail: info@schilling-marking.de

Telephone: +49 (0)7461 9472-0

Telefax: +49 (0)7461 9472-28

Dept. responsible for information:

Herr Andreas 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)**

Acute Tox. 4; H302 Harmful if swallowed.

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

Xn; R22 Harmful if swallowed.

2.2 Label elements**Labelling (CLP)**

Signal word:

Warning

Hazard statements:

H302 Harmful if swallowed.

Safety precautions:

P102 Keep out of reach of children.

P264

Wash hands and face thoroughly after handling.

P270

Do not eat, drink or smoke when using this product.

P301+P310

IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P330

Rinse mouth.

Electrolyte AE 36

Article number 22.036

Page:

2 of 7

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

Xn

harmful

R phrase(s):	R 22	Harmful if swallowed.
S phrase(s):	S 2	Keep out of the reach of children.
	S 13	Keep away from food, drink and animal feedingstuffs.
	S 24	Avoid contact with skin.
	S 37	Wear suitable gloves.
	S 46	If swallowed, seek medical advice immediately and show this container or label.
	S 64	If swallowed, rinse mouth with water (only if the person is conscious).

Special labelling

Text for labelling: Contains Sodium nitrite, Sodium nitrate.

2.3 Other hazards

No risks worthy of mention.

SECTION 3: Composition / information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterization: Aqueous solution of anorganic salts and organic compounds.

Hazardous ingredients:

Ingredient	Designation	Content	Classification
EINECS 231-555-9 CAS 7632-00-0	Sodium nitrite	1 - 5 %	EU: O; R8. T; R25. N; R50. CLP: Ox. Sol. 3; H272. Acute Tox. 3; H301. Aquatic Acute 1; H400.
EINECS 231-554-3 CAS 7631-99-4	Sodium nitrate	1 - 5 %	EU: O, Xn; R 8, 22 CLP: Ox. Sol. 3; H272. Acute Tox. 4; H302.

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

In case of 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 soap and 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. Induce vomiting when the affected person is not unconscious. Never give anything by mouth to an unconscious person. Seek medical attention.

4.2 Most important symptoms and effects, both acute and delayed

May cause irritations.

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: sodium compounds, nitrogen oxides (NOx), carbon monoxide and carbon dioxide.

5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained positive pressure breathing apparatus and full firefighting protective clothing.

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.
Wear protective equipment. Do not breathe vapour/aerosol.

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.

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.
Wear protective equipment. Do not mix with other chemicals.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container tightly closed in a cool, well-ventilated place.

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.

Electrolyte AE 36

Article number 22.036

Page:

4 of 7

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.
- 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. When using do not eat, drink or smoke.
- General protection and hygiene measures:
Change contaminated clothing. Avoid contact with skin and eyes.
Eye wash facility must be provided. When using do not eat, drink or smoke.
Wash hands before breaks and after work.

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

- Appearance: Physical state: liquid
Colour: colourless, clear
- Odour: characteristic
- Odour threshold: no data available
- pH value: 7.5 - 8.5
- Melting point/freezing point: no data available
- Initial boiling point and boiling range: no data available
- Flash point/flash point range: not combustible
- Evaporation rate: no data available
- Flammability: no data available
- Explosive properties: no data available
- Explosion limits: no data available
- Vapour pressure: no data available
- Vapour density: no data available
- Density: at 20 °C: 1.05 - 1.08 g/mL
- Water solubility: at 20 °C: completely miscible
- Partition coefficient: n-octanol/water: no data available
- Auto-ignition temperature: no data available
- Thermal decomposition: no data available
- Viscosity, dynamic: no data available
- Explosive properties: no data available
- Oxidizing characteristics: no data available

9.2 Other information

- Additional information: no data available

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

Refer to 10.3

Electrolyte AE 36

Article number 22.036

Page:

5 of 7

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 productsIn the event of a fire, the following may be produced when the water evaporates: sodium compounds, nitrogen oxides (NO_x), carbon monoxide and carbon dioxide.

Thermal decomposition: no data available

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

Toxicological effects: Acute toxicity (oral): Acute Tox. 4; H302 = Harmful if swallowed.

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: 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.

Other information: Information about Sodium nitrite:

LD50, Rat oral: 85 mg/kg; LDLo human: 4 - 6 g. Toxic if swallowed.

After resorption of toxic quantities: Nausea, vomiting, blood pressure drop, respiratory complaints, collapse, unconsciousness, narcosis, cyanosis (blue coloured blood), methaemoglobinaemia.

SECTION 12: Ecological information**12.1 Toxicity**

Further details: no data available

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 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.
Non-contaminated packages may be recycled.

SECTION 14: Transport information

14.1 UN number

ADR/RID, IMDG, IATA: not applicable

14.2 UN proper shipping name

ADR/RID, IMDG, IATA: Not restricted

14.3 Transport hazard class(es)

ADR/RID, IMDG, IATA: not applicable

14.4 Packing group

ADR/RID, IMDG, IATA: not applicable

14.5 Environmental hazards

Marine pollutant: 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

Electrolyte AE 36

Article number 22.036

Page:

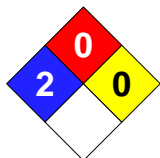
7 of 7

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

Hazchem-Code: -

National regulations - USA

Hazard rating systems:



NFPA Hazard Rating:

Health: 2 (Moderate)

Fire: 0 (Minimal)

Reactivity: 0 (Minimal)

HMIS Version III Rating:

Health: 2 (Moderate)

Flammability: 0 (Minimal)

Physical Hazard: 0 (Minimal)

Personal Protection: X = Consult your supervisor

JT Baker Storage Color Code: Green (General Storage)

HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0
	X

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

SECTION 16: Other information**Further information**

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

H272 = May intensify fire; oxidiser.

H301 = Toxic if swallowed.

H302 = Harmful if swallowed.

H400 = Very toxic to aquatic life.

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

R 8 = Contact with combustible material may cause fire.

R 22 = Harmful if swallowed.

R 25 = Toxic if swallowed.

R 50 = Very toxic to aquatic organisms.

Reason of change:

Changes in section 2: P-phrases

Changes in section 15: National regulations Germany (WGK)

General revision

Date of first version:

05.06.2011

Department issuing data sheet

Contact person:

see section 1: Dept. responsible for information

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

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.