

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU)  
No 453/2010

Revision date: 10/12/2014

Version: 4

Language: en-GB,IE

Date of print: 8/6/2015

## Electrolyte EN

Material number 2170 EN / 2175 EN / 2171 EN / 2185 EN

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

#### 1.1 Product identifier

Trade name: Electrolyte EN

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

General use: Electrolytic/electrochemical metal inscription  
For industrial purposes only

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

Company name: Bymat GmbH

Street/POB-No.: Neusser Straße 106

Postal Code, city: 41363 Jüchen

Germany

WWW: www.bymat.com

E-mail: info@bymat.de

Telephone: +49 (0) 21 65 / 87 28 - 0

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Dept. responsible for information:

Michael Byhahn,

Telephone: +49 (0) 21 65 / 87 28 0, Email: info@bymat.de

#### 1.4 Emergency telephone number

Michael Byhahn, Telephone: +49 (0) 21 65 / 87 28 0

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification according to EC regulation 1272/2008 (CLP)

This mixture is classified as not hazardous.

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

This preparation is classified as not hazardous.

#### 2.2 Label elements

##### Labelling (CLP)

Hazard statements: not applicable

Precautionary statements: not applicable

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

R phrase(s): not applicable

S phrase(s): not applicable

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### 2.3 Other hazards

Electrolytic vapours may form during signature processes under direct current voltage.  
May be harmful if inhaled.

## SECTION 3: Composition / information on ingredients

3.1 Substances: not applicable

### 3.2 Mixtures

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

Additional information: Preparation does not contain dangerous substances above limits that need to be mentioned in this section according to applicable EU-legislation.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

In case of inhalation: Provide fresh air. Seek medical treatment in case of troubles.

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

After eye contact: With eyelids open, wash out eyes for several minutes under flowing water. In case of troubles or persistent symptoms, consult an ophthalmologist.

After swallowing: Rinse mouth thoroughly with 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

Fires in the immediate vicinity may cause the development of dangerous vapours.

### 5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained breathing apparatus.

Additional information: Hazchem-Code: -

Do not allow water used to extinguish fire to enter drains, ground or waterways. Treat runoff as hazardous.

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### SECTION 6: Accidental release measures

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

Avoid contact with skin and eyes. 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

Wipe up with absorbent material (eg. cloth, fleece).

#### 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: Wear protective equipment. Do not breathe vapour/aerosol.  
Avoid contact with skin and eyes.  
Provide adequate ventilation, and local exhaust as needed.  
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)

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 adequate ventilation.

#### Personal protection equipment

##### Occupational exposure controls

Respiratory protection: Use a breathing protection against vapours/aerosol.

Hand protection: Recommendation: Protective gloves according to EN 374.

Glove material: Nitrile rubber

Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Recommendation: Tightly sealed goggles according to EN 166.

Body protection: Wear suitable protective clothing.

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General protection and hygiene measures:

Avoid contact with skin and eyes.  
Change contaminated clothing. Do not breathe vapour/aerosol.  
Wash hands before breaks and after work.  
When using do not eat, drink or smoke.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance:	Form: liquid Colour: colourless
Odour:	characteristic
Odour threshold:	no data available
pH value:	neutral
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
Explosion limits:	no data available
Vapour pressure:	no data available
Vapour density:	no data available
Density:	at 20 °C: 1.03 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

### 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.

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### 10.4 Conditions to avoid

Do not mix with other chemicals.

### 10.5 Incompatible materials

Strong acids and alkalis

### 10.6 Hazardous decomposition products

Fires in the immediate vicinity may cause the development of dangerous vapours.

Thermal decomposition: no data available

## 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: Based on available data, the classification criteria are not met.  
mild irritant  
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.

## 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

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### 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 99 = 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)

Recommendation: Smaller amounts: Product can be released into the sewage system.

#### 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-DGR:  
not applicable

### 14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR:  
Not restricted

### 14.3 Transport hazard class(es)

ADR/RID, IMDG, IATA-DGR:  
not applicable

### 14.4 Packing group

ADR/RID, IMDG, IATA-DGR:  
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

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### SECTION 15: Regulatory information

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

##### National regulations - Great Britain

Hazchem-Code: -

#### 15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

### SECTION 16: Other information

#### Further information

Reason of change: General revision

Date of first version: 20/6/2008

#### 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.