
1. Identification of the substance/preparation and of the company/undertaking

Identification of the substance or preparation

Name of product: Electrolyte AE 20

Use of the substance / preparation

Electrolytic marking technology / Application for stainless low- & high alloy steels, large etching surfaces, special dark on hardened steels

Company / undertaking identification

Company name: Schilling Marking Systems GmbH

Street/POB-No.: In Grubenaecker 1

State/city/postal code: DE-78532 Tuttlingen Germany

World Wide Web: www.schilling-marking.de

Email: info@schilling-marking.de

Telephone: +49 (0)7461 9472-17

Telefax: +49 (0)7461 9472-29

Dept. responsible for information:

Herr Andreas Schilling,

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

Emergency telephone

Beratungsstelle für Vergiftungserscheinungen, Berlin,**Telephone: +49 (0)30 19240**

US and Canada Chemtrec Phone Number: +1 (800) 424-9300

2. Hazards identification

Classification

Product is classified and labelled in accordance with Directive 1999/45/EC as amended.

According to EC directives or the corresponding national regulations there is no labelling obligation for this product.

Critical hazard to man and environment:

Electrolytic vapours may form during the electrochemical process.

The following applies to Lactic acid and Sodium-Isoalkylsulfate in general:

Irritant. Risk of serious damage to eyes.

A corrosive effect cannot be ruled out because of the pH value.

3. Composition/information on ingredients

Chemical characterization (preparation)

mixture of water/mineral salt and complexing agent

Dangerous ingredients:

CAS-No.	EINECS/ELINCS	Chemical name	Content	Classification
79-33-4	201-196-2	Lactic acid	1-5 %	Xi; R 38, 41
126-92-1	204-812-8	Sodium-Isoalkylsulfate	1-10 %	Xi; R 38, 41

4. First aid measures

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

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

After swallowing: Rinse mouth immediately and drink large quantities of water.
If you feel unwell, seek medical advice.

EU SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Date of print: 06/10/2010

Electrolyte AE 20

Material number 22.020

Revision date: 06/10/2010

Date of first version: 20/10/2006

Version 2 / Page 2 of 4

5. Fire fighting measures

Suitable extinguishing media:

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

Special exposure hazards arising from the preparation itself, combustion products, resulting gases:

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

Special protective equipment for fire-fighters:

Wear self-contained breathing apparatus.

Additional information:

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

6. Accidental release measures

Personal precautions:

Avoid contact with eyes. Provide adequate ventilation.

Environmental precautions:

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

Methods for 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.

7. Handling and storage

Handling

Information for safe handling:

Provide adequate ventilation, and local exhaust as needed.

Avoid contact with eyes. Do not breathe vapour or spray.

Do not mix with other chemicals.

Storage

Requirements for storerooms and containers:

Keep container tightly closed and dry. Store at room temperature.

Storage class:

12

8. Exposure controls / Personal protection equipment

Exposure controls

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

See also information in chapter 7, section storage.

Occupational exposure controls

Respiratory protection:

If vapours form, use respiratory protection. Combination filter according to EN 141.

Hand protection:

Protective gloves according to EN 374.

Glove material: Nitrile rubber - Breakthrough time: >480 min.

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

Eye protection:

Tightly sealed safety glasses according to EN 166.

Skin protection:

Wear suitable protective clothing.

General protection and hygiene measures:

Change contaminated clothing.

Wash hands before breaks and at the end of work.

Provide a conveniently located eye rinse station.

EU SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Date of print: 06/10/2010

Electrolyte AE 20

Material number 22.020

Revision date: 06/10/2010

Date of first version: 20/10/2006

Version 2 / Page 3 of 4

9. Physical and chemical properties

Appearance

Physical state: liquid
Colour: colourless
Odour: characteristic

Important health, safety and environmental information

Flash point / flash point range: not combustible
Density: at 20 °C: 1,03 g/ml
pH value: 1,5-2,5
Solubility in water: at 20 °C: fully miscible

10. Stability and reactivity

Conditions to avoid: Do not mix with other chemicals.
Materials to avoid: strong acids and alkalis
Hazardous decomposition products:
In the event of a fire, the following may be produced when the water evaporates:
Carbon monoxide and carbon dioxide.
Additional information: Product is stable under normal storage conditions.

11. Toxicological information

Toxicological Tests:

After skin contact: May cause irritations.
After eye contact: The following applies to Lactic acid and Sodium-Isoalkylsulfate in general:
Irritant. Risk of serious damage to eyes.

12. Ecological information

Ecotoxicity

Water Hazard Class: 1 = mild water pollutant

Additional ecological information

General information: Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13. Disposal considerations

Product

Waste key number 110198* = 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: Smaller amounts: Product can be released into the sewage system.

Contaminated packaging

Waste key number 150102 = plastic packaging
Recommendation: Waste disposal according to official state regulations.
Cleaned containers may be recycled.

EU SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)

Date of print: 06/10/2010

Electrolyte AE 20

Material number 22.020

Revision date: 06/10/2010

Date of first version: 20/10/2006

Version 2 / Page 4 of 4

14. Transport information

Overland transport (ADR/RID)

Product designation: Not restricted

Transport by sea (IMDG)

Proper shipping name: Not restricted

Air transport (IATA)

Proper shipping name: Not restricted

Additional information

Not a hazardous material with respect to transportation regulations.

15. Regulatory information

Classification

Code letter and hazard symbol:

not applicable

R phrase(s): not applicable

S phrase(s): S 24/25 Avoid contact with skin and eyes.

National regulations

National regulations - Germany

Storage class: 12

Water Hazard Class: 1 = mild water pollutant

Information on working limitations:

Observe employment restrictions concerning young persons.

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

16. Other information

Further remarks

R phrase(s): R 38 = Irritating to skin.
R 41 = Risk of serious damage to eyes.

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.