

# Safety data sheet

## According to 1907/2006/EC, Article 31 REACH

Printing date 12.03.2018

Version: 1

Revision: 12.03.2018

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

- **1.1 Product identifier**
- **Trade name:** SOLUZIONE ELETTROLITICA
- **Article number:** NSH0001A0A
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Sector of Use**  
 SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)  
 SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
- **Application of the substance / the mixture** liquid for electrodes
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
 Aedes srl  
 Via Cancelliera, 12,  
 00041 Albano Laziale RM  
 Tel.: 06.9343260- Fax 06.93495559  
 Lab.chimico@aedes.info
- **Further information obtainable from:**  
 Aedes srl  
 Via Cancelliera, 12,  
 00041 Albano Laziale RM  
 Tel.: 06.9343260- Fax 06.93495559  
 Lab.chimico@aedes.info
- **1.4 Emergency telephone number:** Italy: Niguarda Hospital Ph + 39.0266101029


### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008** The substance is not classified according to the CLP regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Additional information:**  
 Safety data sheet available on request.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 77-92-9	Citric acid	 Eye Irrit. 2, H319	2.5-5%
EINECS: 201-069-1			
Reg.nr.: 01-2119457026-42-XXXX			

- **Ingredients according to Detergents Regulation 648/2004/EC** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

(Contd. on page 2)

GB

# Safety data sheet

## According to 1907/2006/EC, Article 31 REACH

Printing date 12.03.2018

Version: 1

Revision: 12.03.2018

Trade name: **SOLUZIONE ELETTROLITICA**

(Contd. of page 1)

- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:** No special measures required.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, universal binders).
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special measures required.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

#### 8.1 Control parameters

- **Ingredients with limit values that require monitoring at the workplace:**

56-81-5 glycerol (75-100%)

WEL (Great Britain) Long-term value: 10 mg/m<sup>3</sup>

#### · PNECs

77-92-9 Citric acid

PNEC Freshwater mg/L 1,000 mg/L (-)

PNEC Marinewater mg/L 33.1 mg/L (-)

- **Additional information:** The lists valid during the making were used as basis.

#### 8.2 Exposure controls

- **Personal protective equipment:**
- **General protective and hygienic measures:** The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:** Not required.
- **Protection of hands:**
- **Material of gloves**  
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
- **Penetration time of glove material**  
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

(Contd. on page 3)

# Safety data sheet

## According to 1907/2006/EC, Article 31 REACH

Printing date 12.03.2018

Version: 1

Revision: 12.03.2018

Trade name: **SOLUZIONE ELETTROLITICA**

(Contd. of page 2)

### SECTION 9: Physical and chemical properties

#### · 9.1 Information on basic physical and chemical properties

##### · General Information

##### · Appearance:

· Form:	Viscous
· Colour:	Amber coloured
· Odour:	Odourless
· Odour threshold:	Not determined.

· pH-value at 20 °C: 4.4

##### · Change in condition

· Melting point/freezing point:	Undetermined.
· Initial boiling point and boiling range:	100 °C

· Flash point: >90 °C

· Flammability (solid, gas): Not applicable.

· Ignition temperature: 400 °C

· Decomposition temperature: Not determined.

· Auto-ignition temperature: Product is not selfigniting.

· Explosive properties: Product does not present an explosion hazard.

##### · Explosion limits:

· Lower:	Not determined.
· Upper:	Not determined.

· Vapour pressure at 20 °C: <0,1 hPa

· Density at 20 °C: 1.276 g/cm<sup>3</sup>

· Relative density: Not determined.

· Vapour density: Not determined.

· Evaporation rate: Not determined.

##### · Solubility in / Miscibility with water:

Fully miscible.

· Partition coefficient: n-octanol/water: Not determined.

##### · Viscosity:

· Dynamic at 20 °C:	9.39 mPas
· Kinematic:	Not determined.

##### · Solvent content:

· Organic solvents:	85,5 %
· EU-VOC:	0.0 g/l
· EU-VOC	0.00 %
· Swiss VOC:	0.00 %

· 9.2 Other information: No further relevant information available.

### SECTION 10: Stability and reactivity

· 10.1 Reactivity: No further relevant information available.

#### · 10.2 Chemical stability

· Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

· 10.3 Possibility of hazardous reactions: No dangerous reactions known.

· 10.4 Conditions to avoid: No further relevant information available.

· 10.5 Incompatible materials: No further relevant information available.

· 10.6 Hazardous decomposition products: No dangerous decomposition products known.

GB

(Contd. on page 4)

# Safety data sheet

## According to 1907/2006/EC, Article 31 REACH

Printing date 12.03.2018

Version: 1

Revision: 12.03.2018

Trade name: SOLUZIONE ELETTROLITICA

(Contd. of page 3)

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

#### · LD/LC50 values relevant for classification:

##### 77-92-9 Citric acid

Oral	LD50	5,400 mg/kg (Rat)
	LC50 / 48 h	160 mg/ltr (-)
	LC50 / 96 h	1,516 mg/ltr ( <i>Lepomis Macrochirus</i> (Bluegill Sunfish))
	EC 50 / 72 H	120 ( <i>Daphnia magna</i> (water flea))

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

### SECTION 12: Ecological information

#### · 12.1 Toxicity

##### · Aquatic toxicity:

##### 77-92-9 Citric acid

COD	728 (mg O <sub>2</sub> / g product)
-----	-------------------------------------

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal in accordance with administrative provisions

### SECTION 14: Transport information

- |  |      |
|--|------|
| · <b>14.1 UN-Number</b>                  |      |
| · <b>ADR, ADN, IMDG, IATA</b>            | Void |
| · <b>14.2 UN proper shipping name</b>    |      |
| · <b>ADR, ADN, IMDG, IATA</b>            | Void |
| · <b>14.3 Transport hazard class(es)</b> |      |
| · <b>ADR, ADN, IMDG, IATA</b>            |      |
| · <b>Class</b>                           | Void |
| · <b>14.4 Packing group</b>              |      |
| · <b>ADR, IMDG, IATA</b>                 | Void |

(Contd. on page 5)

# Safety data sheet

## According to 1907/2006/EC, Article 31 REACH

Printing date 12.03.2018

Version: 1

Revision: 12.03.2018

Trade name: **SOLUZIONE ELETTROLITICA**

(Contd. of page 4)

- |  |                 |
|--|-----------------|
| · <b>14.5 Environmental hazards:</b>   | Not applicable. |
| · <b>14.6 Special precautions for user</b>                                       | Not applicable. |
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | Void            |

### SECTION 15: Regulatory information

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

Reg. (EC) n. 1272/2008 - CLP;  
 Reg. (EC) n. 1907/2006 – Reach;  
 Reg. (EC) n. 2015/830 annex II of REACH;  
 Reg. (EC) n. 648/04 (Detergents);  
 Reg. (EC) n. 528/12 (Biocides BPR);  
 Reg. (EC) n. 1223/2009 (Cosmetics);  
 Dir. 06/08 ADR – RID - IMDG - IATA;  
 Dir. 47/08 (Aerosols); Dir. 12/18 (Seveso III);  
 Dir. 2008/98/CE and Reg. (EC) n.1357/2014 (Waste management)

- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **National regulations:**

· **Technical instructions (air):**

Class	Share in %
NK	75-100

- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**

H319 Causes serious eye irritation.

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOCV: Lenkungsabgabe auf flüchtigen organischen Verbindungen, Schweiz (Swiss Ordinance on volatile organic compounds)

VOC: Volatile Organic Compounds (USA, EU)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

- **\* Data compared to the previous version altered.**