



# SAFETY DATA SHEET

Place and date of issue:  
Villaverla: 01.03.2019



CS0012

**STAINLESS STEEL MARKING  
ELECTROLYTE**

EN.....P.1  
DE.....P.7

## Section 1: Identification of the substance / mixture and of the Company

### 1.1 Identification of the product, substance or mixture

Product identifier 804029 (TC41582)  
Product name STAINLESS STEEL MARKING ELECTROLYTE

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

Description/Use: Laboratory reagent

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

Supplier TELWIN SPA  
Street address Via della Tecnica, 3  
Country 36030 VILLAVERLA (VI)  
Telephone number +39 0445 858811  
Fax +39 0445 858800  
\* e-mail address telwin@telwin.com

### 1.4 Emergency telephone number

+39 0445 858811 (working hours)

## Section 2: Hazards identification

### 2.1 Classification of the substance or mixture

The product is not classified as hazardous pursuant to the provisions of Regulation (EC) 1272/2008 (CLP). (And subsequent amendments and adaptations). Classification and hazard statement: --

### 2.2 Label elements

Hazard pictograms: --  
Warnings: --  
Hazard statements: --  
Safety advice: --

### 2.3 Other hazards

Based on data available, the product does not contain PBT or vPvB substances at levels in excess of 0.1%.

## Section 3: Composition/information on ingredients

### 3.1 Substances

Information not relevant.

### 3.2 Mixtures

The product does not contain substances classified as hazardous for health and the environment pursuant to the provisions of Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and adaptations) in such quantities to require their declaration.

## Section 4: First aid measures

### 4.1 Description of first aid measures

Not specifically necessary. You are advised in any case to comply with good industrial hygiene practices.

### 4.2 Most important symptoms and effects, both acute and delayed

No episodes of damage to health ascribable to the product have been reported.

### 4.3 Indication of any immediate medical attention and special treatment needed

Information not available.



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## CS0012 STAINLESS STEEL MARKING ELECTROLYTE

EN.....P.1  
DE.....P.7

### Section 5: Firefighting measures

The product is non-flammable and does not stimulate flames

#### 5.1 Extinguishing media

##### SUITABLE EXTINGUISHING MEDIA

The extinguishing media are traditional ones: carbon dioxide, foam, powder and water spray.

##### UNSUITABLE EXTINGUISHING MEDIA

None in particular.

#### 5.2 Special hazards arising from the substance or mixture

##### HAZARDS DUE TO EXPOSURE IN THE EVENT OF FIRE

Avoid breathing in inflamed products.

#### 5.3 Advice for firefighters

##### GENERAL INFORMATION

Cool the containers with water jets to avoid decomposition of the product and development of potentially hazardous substances for health.

Always wear complete fire fighting equipment. Collect water used for extinguishing which must not be drained into the sewers.

Dispose of contaminated water used for extinguishing and fire residue according to standards in force.

##### EQUIPMENT

Wear normal fire fighting gear, such as an open circuit compressed air breathing apparatus (EN 137), fire retardant clothing (EN 469), fire retardant gloves (EN 659) and fire-fighter boots (HO A29 or A30).

### Section 6: Accidental release measures

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

Stop the leak if not in danger.

Wear adequate personal protective equipment (including personal protective equipment pursuant to section 8 of the safety data sheet, if anticipated) to prevent contaminating the skin, eyes and personal clothing. These indications apply both to workers and emergency intervention operators.

#### 6.2 Environmental precautions

Prevent the product penetrating sewers, surface water and groundwater.

#### 6.3 Methods and material for containment and cleaning up Soak up spills in a suitable container.

Assess compatibility of the container to use with the product, checking section 10.

Absorb the remainder with absorbent inert material.

Ensure sufficient ventilation of the location of the spill. Disposal of contaminated material must be carried out in compliance with provisions in point 13.

#### 6.4 Reference to other sections

Possible information on individual protection and disposal are outlined in sections 8 and 13.

### Section 7: Handling and storage

#### 7.1 Precautions for safe handling

Avoid dispersion of the product in the environment. Do not eat, drink or smoke during use.

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

Keep the product in clearly labelled containers. Keep the containers far from any incompatible materials, checking section 10.

#### 7.3 Specific end use(s).

Information not available.



# SAFETY DATA SHEET

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## CS0012 STAINLESS STEEL MARKING ELECTROLYTE

EN.....P.1  
DE.....P.7

### Section 8: Exposure controls/personal protection

#### 8.1 Control parameters

Reference Standards:

TLV-ACGIH

ACGIH 2016

<b>GLYCERIN</b>					
<b>Threshold limit values.</b>					
Type	Status	TWA/8h		STEL/15min	
		mg/m3	ppm	mg/m3	ppm
TLV-ACGIH		10			

#### **CITRIC ACID MONOHYDRATE**

Planned concentration with no effect on the environment - PNEC.

Reference value in fresh water	440	mg/l
Reference value for sediment in fresh water	7.52	mg/kg
Reference value for sediment in salt water	0.752	mg/kg
Reference value for terrestrial compartment	29.2	mg

Legend:

C) = CEILING; INHALAB = Inhalable Fraction; RESPIR = Respirable Fraction; TORAC = Thoracic Fraction.

#### 8.2 Exposure controls

The usual safety measures should be adhered to for handling chemicals.

- Hand protection: Not necessary.
- Skin protection: Not necessary.
- Eye protection: Not necessary.
- Respiratory protection: In the event a threshold value is exceeded (e.g. TLV-TWA) of the substance or one or more of the substances in the product, you are advised to wear a mask with filter type B whose class (1, 2 or 3) should be chosen in relation to the use limit concentration. (ref. standard EN 14387). If gas or vapours are present of a different nature and/or gas or vapours with particles (aerosols, fumes, mist, etc.), you need to use combined filters.
- Use of protective equipment for the airways is necessary in the event the technical measures implemented are not sufficient to limit workers' exposure to the threshold values taken into consideration. The protection offered by the masks is however limited. If the substance considered is odourless or its odour threshold is higher than the relevant TLV-TWA and in the event of an emergency, wear an open circuit, compressed air breathing apparatus (ref. standard EN 137) or an external air supply breathing apparatus (ref. standard EN 138). To correctly choose the airways protection equipment, refer to standard EN 529.
- Environmental exposure controls. Production process emissions, including those from ventilation devices should be checked to ensure compliance with environmental protection legislation.

### Section 9: Physical and chemical properties

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

PROPERTIES	VALUE
Physical state	Clear Liquid
Colour	Blue
Odour	Not available
Odour threshold	Not available
pH	Not available
Melting point/freezing point	Not applicable
Initial boiling point and boiling range	Not available
Flash point	Not available
Evaporation rate	Not available
Flammability (solid, gas)	Not applicable
lower flammability limit	Not applicable
Upper flammability limit	Not applicable
Lower explosive limit	Not applicable
Upper explosive limit	Not applicable
Vapour pressure	Not available
Vapour density	Not available
Relative density	1,061
Solubility	In water
Partition coefficient: n-octanol/water	Not available
Auto-ignition temperature	Not applicable
Decomposition temperature	Not available



# SAFETY DATA SHEET

Place and date of issue:  
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## CS0012 STAINLESS STEEL MARKING ELECTROLYTE

EN.....P.1  
DE.....P.7

Viscosity	Not available
Explosive properties	Not applicable
Oxidising properties	Not available

### 9.2 Other information

VOC (Directive 2010/75/EC): 0

VOC (volatile carbon): 0

Explosion hazard: NO

## Section 10: Stability and reactivity

### 10.1 Reactivity

There are no particular reaction hazards with other substances in normal use conditions.

### 10.2 Chemical stability

The product is stable in normal use and storage conditions.

### 10.3 Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal use and storage conditions.

### 10.4 Conditions to avoid

None in particular. However, comply with the usual precautions for chemical products.

### 10.5 Incompatible materials

Information not available.

### 10.6 Hazardous decomposition products

Information not available.

## Section 11: Toxicological information

### 11.1 Information on toxicological effects

There are no known health-related episodes due to exposure to the product. In any case, it is recommended to comply with the rules of good Industrial hygiene.

#### ACUTE TOXICITY.

LC50 (Inhalation - vapours) of the mixture: Not classified (no relevant component).

LC50 (Inhalation - mist/dust) of the mixture: Not classified (no relevant component).

LD50 (Oral) of the mixture: Not classified (no relevant component).

LD50 (Skin) of the mixture: Not classified (no relevant component).

#### SODIUM CHLORIDE

LD50 (Oral).3000 mg/kg Rat

#### GLYCERIN

LD50 (Oral).12600 mg/kg rat (4090 mg/kg mouse)

LD50 (Skin).> 10000 mg/kg rabbit

LC50 (Inhalation).> 570 mg/m<sup>3</sup> (1 h) rat

#### SKIN CORROSION / SKIN IRRITATION.

Does not meet the classification criteria for this hazard class.

#### SERIOUS EYE DAMAGE / EYE IRRITATION.

Does not meet the classification criteria for this hazard class.

#### RESPIRATORY OR SKIN SENSITISATION.

Does not meet the classification criteria for this hazard class.

#### GERM CELL MUTAGENICITY.

Does not meet the classification criteria for this hazard class.

#### CARCINOGENICITY.

Does not meet the classification criteria for this hazard class.

#### REPRODUCTIVE TOXICITY.

Does not meet the classification criteria for this hazard class.

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Does not meet the classification criteria for this hazard class.

#### SPECIFIC TARGET ORGAN TOXICITY (STOT) - SINGLE EXPOSURE.

Does not meet the classification criteria for this hazard class.

#### SPECIFIC TARGET ORGAN TOXICITY (STOT) - REPEATED EXPOSURE.

Does not meet the classification criteria for this hazard class.

#### ASPIRATION HAZARD.

Does not meet the classification criteria for this hazard class.



# SAFETY DATA SHEET

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## CS0012 STAINLESS STEEL MARKING ELECTROLYTE

EN.....P.1  
DE.....P.7

### Section 12: Ecological information

Use according to good working practices, avoiding release of the product in the environment. Notify the competent authorities if the product has reached waterways or it has contaminated the ground or vegetation.

#### 12.1 Toxicity

GLYCERIN:

EC50 (24 h) Daphnia	> 10000 mg/l
LC50 (24 h) Fish	> 10000 mg/l.
EC50 - Shellfish.	> 100 mg/l/48h
LC10 Fish..	> 100 mg/l/96h

#### 12.2 Persistence and degradability

GLYCERIN:

Readily Biodegradable.

#### 12.3 Bioaccumulative potential

Information not available.

#### 12.4 Mobility in soil

Information not available.

#### 12.5 Results of PBT and vPvB assessment

Based on data available, the product does not contain PBT or vPvB substances at levels in excess of 0.1%.

#### 12.6 Other adverse effects

Information not available.

### Section 13: Disposal considerations

#### 13.1 Waste treatment methods

Re-use, if possible. The product residue as such is considered non-hazardous special waste.

Disposal must be entrusted to a company authorised to manage waste, in compliance with national and, possible, local legislation.

**CONTAMINATED PACKAGING**

Contaminated packaging must be sent for recycling or disposal in compliance with national standards on waste management.

### Section 14: Transport information

The product is not considered hazardous pursuant to provisions in force on transport of hazardous goods by road (A.D.R.) or rail (RID), by sea (IMDG Code) and by air (IATA).

### Section 15: Regulatory information

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

Seveso category - Directive 2012/18/EC:

Restrictions relating to the product or contained substances pursuant to Annex XVII EC Regulation 1907/2006: None.

Substances in Candidate List (Art. 59 REACH): None.

Substances subject to authorisation (Annex XIV REACH): None.

List of substances subject to export notification procedure Reg. (EC) 649/2012: None.

Substances subject to Rotterdam Convention: None.

Substances subject to Stockholm Convention: None.

Health Checks: Information not available.

#### 15.2 Chemical safety assessment.

A chemical safety assessment was not drafted for the mixture and the substances it contains.



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ELECTROLYTE**

EN.....P.1

DE.....P.7

## Section 16: Other information

### LEGEND:

- ADR: European Agreement concerning the Carriage of Dangerous Goods by Road
- CAS NUMBER: Chemical Abstract Service number
- CE50: Concentration that affects 50% of the population subject to testing
- EC NUMBER: Identification number in ESIS (European Standardised Information Sheet)
- CLP: Regulation EC 1272/2008
- DNEL: Derived No-Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonised System for the classification and labelling of chemical products
- IATA DGR: Regulation for the carriage of dangerous goods by the International Air Transport Association
- IC50: Immobilisation concentration of 50% of the population subject to testing
- IMDG: International Maritime Dangerous Goods Code
- IMO: International Maritime Organization
- INDEX NUMBER: Identification number of Annex VI of the CLP
- LC50: Lethal concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational exposure level
- PBT: Persistent, bioaccumulative and toxic according to REACH
- PEC: Predicted environmental concentration
- PEL: Predicted exposure level
- PNEC: Predicted no-effect concentration
- REACH: Regulation EC 1907/2006
- RID: Regulation concerning the international carriage of dangerous goods by rail
- TLV: Threshold limit value
- TLV CEILING: Concentration that must not be exceeded during any moment of work exposure.
- TWA STEL: Short term exposure limit
- TWA: Time weighted average exposure limit
- VOC: Volatile organic compound
- vPvB: Very persistent, very bioaccumulating according to REACH
- WGK: Water Endangerment Class (Germany).

### GENERAL BIBLIOGRAPHY:

1. Regulation (EU) 1907/2006 of the European Parliament (REACH)
  2. Regulation (EU) 1272/2008 of the European Parliament (CLP)
  3. Regulation (EU) 790/2009 of the European Parliament (I Atp. CLP)
  4. Regulation (EU) 2015/830 of the European Parliament
  5. Regulation (EU) 286/2011 of the European Parliament (II Atp. CLP)
  6. Regulation (EU) 618/2012 of the European Parliament (III Atp. CLP)
  7. Regulation (EU) 487/2013 of the European Parliament (IV Atp. CLP)
  8. Regulation (EU) 944/2013 of the European Parliament (V Atp. CLP)
  9. Regulation (EU) 605/2014 of the European Parliament (VI Atp. CLP)
- The Merck Index. - 10th Edition
  - Handling Chemical Safety
  - INRS - Fiche Toxicologique (toxicological sheet)
  - Patty - Industrial Hygiene and Toxicology
  - N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
  - ECHA Agency Web Site

### Note for user:

The information contained in this data sheet is based on the knowledge available to us on the latest version date. The user must ensure suitability and completeness of information relative to the specific product use.

This document must not be interpreted as a warranty of any specific property of the product.

Since use of the product is not directly under our control, the user is obliged to follow, under his responsibility, valid laws and regulations on hygiene and safety.

No liability can be taken for improper use.

Provide adequate information to staff responsible for use of chemical products.