

Safety Data Sheet

GRENZEN VERSCHIEBEN

according to Regulation (EC) No 1907/2006

Electrolyte powder

Print date: 06.10.2014

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

1.1. Product identifier

Electrolyte powder

Product code:

42,0411,8041

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

Use of the substance/mixture

Electrolyte-Powder

1.3. Details of the supplier of the safety data sheet

Company name:	Fronius International GmbH	
Street:	Fronius Straße 5	
Place:	A-4642 Sattledt	
Telephone:	+43 / (0)7242 / 241-0	Telefax: +43 / (0)7242 / 241-8799
Internet:	www.fronius.com	
Responsible Department:	welding.techsupport@fronius.com	msds.techsupport@fronius.com
	Office hours:	
	Mon – Thu: 08:00 – 16:30	
	Fri: 08:00 – 12:00	
1.4. Emergency telephone number:	+44 (0) 20 76 35 91 91	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Indications of danger: Xi - Irritant

R phrases:

Risk of serious damage to eyes.

GHS classification

Hazard categories:

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

Causes serious eye damage.

2.2. Label elements

Hazardous components which must be listed on the label

sodium hydrogensulphate

Signal word: Danger

Pictograms: GHS05

**Hazard statements**

H318 Causes serious eye damage.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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P310

Immediately call a POISON CENTER/doctor.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Hazardous components**

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
231-665-7	sodium hydrogensulphate	25 - < 50 %
7681-38-1	Xi - Irritant R41	
016-046-00-X	Eye Dam. 1; H318	
201-069-1	Citric acid	25 - < 50 %
77-92-9	Xi - Irritant R36	
	Eye Irrit. 2; H319	

Full text of R-, H- and EUH-phrases: see section 16.

SECTION 4: First aid measures**4.1. Description of first aid measures****After inhalation**

Provide fresh air.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water.

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

No information 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**

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

Non-flammable.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Avoid generation of dust. Do not breathe dust. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Avoid generation of dust. Do not breathe dust.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations.

Advice on storage compatibility

No special measures are necessary.

7.3. Specific end use(s)

Electrolyte-Powder

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection

Suitable eye protection: goggles.

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Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

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

Physical state: solid
Colour: white
Odour: characteristic

Test method

pH-Value (at 20 °C): 2,2

Changes in the physical state

Melting point: not determined
Initial boiling point and boiling range: not determined
Flash point: not applicable

Flammability

Solid: not determined
Gas: not applicable

Explosive properties

The product is not: Explosive

Lower explosion limits: not determined
Upper explosion limits: not determined

Auto-ignition temperature

Solid: The product is not: Spontaneously flammable.
Gas: not applicable
Decomposition temperature: not determined

Oxidizing properties

Not oxidizing.

Vapour pressure: not determined
Density (at 20 °C): 1,32 g/cm³
Water solubility: 1000 g/L
(at 20 °C)

Solubility in other solvents

not determined

Partition coefficient: not determined
Vapour density: not determined
Evaporation rate: not determined

9.2. Other information

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Solid content:

100 %

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

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity**

Based on available data, the classification criteria are not met.

Acute toxicity

CAS No	Chemical name	Exposure routes	Method	Dose	Species	Source
7681-38-1	sodium hydrogensulphate	oral	LD50	2140 mg/kg	Rat	IUCLID
77-92-9	Citric acid	oral	LD50	5400 mg/kg	Mouse	IUCLID
		dermal	LD50	> 2000 mg/kg	Rat	IUCLID

Irritation and corrosivity

Causes serious eye damage.

Sensitising effects

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

Severe effects after repeated or prolonged exposure

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

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**

The product is not: Ecotoxic.

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CAS No	Chemical name	Method	Dose	[h] [d]	Species	Source
7681-38-1	sodium hydrogensulphate					
	Acute fish toxicity	LC50	7960 mg/l	96 h	Pimephales promelas (fathead minnow)	IUCLID
	Acute crustacea toxicity	EC50	4736 mg/l	48 h	Daphnia magna (Big water flea)	EPA 600/R-94/024
77-92-9	Citric acid					
	Acute fish toxicity	LC50	440 mg/l	96 h	Leuciscus idus melanotus	IUCLID
	Acute crustacea toxicity	EC50	1535 mg/l	48 h	Daphnia magna	IUCLID

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name	Method	Value	d	Source
	Citric acid				
77-92-9	Citric acid				
	OECD 301E/ EEC 92/69/V, C.4-B		100 %	19	
	Readily biodegradable (according to OECD criteria).				

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
77-92-9	Citric acid	-0,12

BCF

CAS No	Chemical name	BCF	Species	Source
7681-38-1	sodium hydrogensulphate	0,5		

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Advice on disposal**

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information**Land transport (ADR/RID)****14.1. UN number:**

No dangerous good in sense of this transport regulation.



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14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

EU regulatory information

Additional information

To follow: 850/2004/EC , 79/117/EEC , 689/2008/EC

National regulatory information

Employment restrictions: Observe employment restrictions for young people.

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

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 Harmonized 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

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

Relevant R-phrases (Number and full text)

36 Irritating to eyes.

41 Risk of serious damage to eyes.

Relevant H- and EUH-phrases (Number and full text)

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.



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(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)