

Safety Data Sheet

Fronius International GmbH

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according to Regulation (EC) No 1907/2006

Magic Cleaner - Brightening electrolyte

Print date: 06.10.2014 Page 1 of 9

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

1.1. Product identifier

Magic Cleaner - Brightening electrolyte

Product code: 42,0411,8018

42,0411,8065

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

Use of the substance/mixture

Electrolyte solution

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

Office hours:

Mon - Thu: 08:00 - 16:30

Fri: 08:00 - 12:00

1.4. Emergency telephone +44 (0) 20 76 35 91 91

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Indications of danger: C - Corrosive

R phrases:

Causes severe burns.

GHS classification

Hazard categories:

Skin corrosion/irritation: Skin Corr. 1A

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

Causes severe skin burns and eye damage.

2.2. Label elements

Hazardous components which must be listed on the label

Phosphoric acid Sulphuric acid

Signal word: Danger Pictograms: GHS05



Hazard statements

H314 Causes severe skin burns and eye damage.

Precautionary statements

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.





Safety Data Sheet

according to Regulation (EC) No 1907/2006

Magic Cleaner - Brightening electrolyte

Print date: 06.10.2014 Page 2 of 9

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P310 Immediately call a POISON CENTER/doctor.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P501 Dispose of contents/container to Dispose of waste according to applicable legislation.

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		
231-633-2	Phosphoric acid	50 - < 75 %
7664-38-2	C - Corrosive R34	
015-011-00-6	Skin Corr. 1B; H314	
231-639-5 7664-93-9	Sulphuric acid C - Corrosive R35	10 - < 25 %
016-020-00-8	Skin Corr. 1A; H314	

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down.

After inhalation

Provide fresh air. Medical treatment necessary.

After contact with skin

After contact with skin, wash immediately with polyethylene glycol, followed by plenty of water. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

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

Observe risk of aspiration if vomiting occurs. Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk.

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.



Safety Data Sheet

Fronius International GmbH

according to Regulation (EC) No 1907/2006

Magic Cleaner - Brightening electrolyte

Print date: 06.10.2014 Page 3 of 9

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. In case of fire: Formation of: Gases/vapours, toxic

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. 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

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). 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. Do not breathe gas/fumes/vapour/spray.

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 solution

SECTION 8: Exposure controls/personal protection

8.1. Control parameters



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Magic Cleaner - Brightening electrolyte

Print date: 06.10.2014 Page 4 of 9

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
7664-38-2	Orthophosphoric acid	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL
7664-93-9	Sulphuric acid (mist)	-	0.05		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

8.2. Exposure controls





Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

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.

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.

Suitable material: Butyl caoutchouc (butyl rubber)

Thickness of the glove material: 0.5 mm

Breakthrough time (maximum wearing time): >= 480 min

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: liquid

Colour: not determined Characteristic

Test method

pH-Value (at 20 °C):

Changes in the physical state

Melting point: not determined
Initial boiling point and boiling range: > 100 °C
Flash point: not determined



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Magic Cleaner - Brightening electrolyte

Print date: 06.10.2014 Page 5 of 9

Flammability

Solid: not applicable
Gas: not applicable
Lower explosion limits: not determined
Upper explosion limits: not determined

Auto-ignition temperature

Solid: not applicable
Gas: not applicable
Decomposition temperature: not determined

Oxidizing properties

Not oxidizing.

Vapour pressure: < 0,03 hPa

(at 20 °C)

Density (at 20 °C): 1,36 g/cm³ Water solubility: insoluble

Solubility in other solvents

not determined

Partition coefficient: not determined

Vapour density: not determined

Evaporation rate: not determined

9.2. Other information

Solid content: not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

Possibility of hazardous reactions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Exothermic reaction with: Base, Peroxide, Oxidising agent. The product develops hydrogen in an aqueous solution in contact with metals.

10.4. Conditions to avoid

none

10.5. Incompatible materials

Keep away from: Base, Oxidising agent, Peroxide, Metal.

10.6. Hazardous decomposition products

Hydrogen

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



Safety Data Sheet

according to Regulation (EC) No 1907/2006

Magic Cleaner - Brightening electrolyte

Print date: 06.10.2014 Page 6 of 9

	Exposure routes	Method	Dose	Species	Source			
7664-38-2	Phosphoric acid							
	oral	LD50	2600 mg/kg	Rat	OECD 423			
7664-93-9	Sulphuric acid							
	oral	LD50	2140 mg/kg	Rat	ECHA			

Irritation and corrosivity

Causes severe skin burns and 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.

	The product to flot: Ecotoxi								
CAS No	Chemical name								
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source			
7664-38-2	Phosphoric acid								
	Acute fish toxicity	LC50	138 mg/l	96 h	Gambusia affinis				
7664-93-9	Sulphuric acid								
	Acute fish toxicity	LC50	16 mg/l	96 h	Lepomis macrochirus (Bluegill)	OECD			
	Acute algae toxicity	ErC50	> 100 mg/l	72 h	Desmodesmus subspicatus.	OECD 201			
	Acute crustacea toxicity	EC50	> 100 mg/l		Daphnia magna (Big water flea)	OECD 202			

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

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





Safety Data Sheet

according to Regulation (EC) No 1907/2006

Magic Cleaner - Brightening electrolyte

Print date: 06.10.2014 Page 7 of 9

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: UN 3264

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid,

Sulphuric acid)

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8



Classification code:

Special Provisions:

Limited quantity:

Transport category:

Hazard No:

Tunnel restriction code:

C1

274

Limited quantity:

1 L

80

Tunnel restriction code:

Other applicable information (land transport)

Excepted quantity: E2

Inland waterways transport (ADN)

14.1. UN number: UN 3264

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid,

Sulphuric acid)

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8



Classification code: C1
Special Provisions: 274
Limited quantity: 1 L

Other applicable information (inland waterways transport)

Excepted quantity: E2

Marine transport (IMDG)

14.1. UN number: UN 3264

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid,

Sulphuric acid)

14.3. Transport hazard class(es): 8
14.4. Packing group: |





Safety Data Sheet

according to Regulation (EC) No 1907/2006

Magic Cleaner - Brightening electrolyte

Print date: 06.10.2014 Page 8 of 9

Hazard label:

8

Special Provisions: 274
Limited quantity: 1 L
EmS: F-A, S-B

Other applicable information (marine transport)

Excepted quantity: E2

Air transport (ICAO)

14.1. UN number: UN 3264

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Phosphoric acid,

Sulphuric acid)

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8



Special Provisions: A3 A803 Limited quantity Passenger: 0.5 L

IATA-packing instructions - Passenger:851IATA-max. quantity - Passenger:1 LIATA-packing instructions - Cargo:855IATA-max. quantity - Cargo:30 L

Other applicable information (air transport)

Excepted quantity: E2 Passenger-LQ: Y840

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Warning: strongly corrosive.

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

not applicable

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.



Safety Data Sheet

Fronius International GmbH

according to Regulation (EC) No 1907/2006

Magic Cleaner - Brightening electrolyte

Print date: 06.10.2014 Page 9 of 9

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)

34 Causes burns.35 Causes severe burns.

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

H314 Causes severe skin burns and eye damage.

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.

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