

Trade name: cleaning electrolyte

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

Product details:

Part-number:

42,0411,8015

42,0411,8052

Use of the substance/preparation:

cleaning agent

Manufacturer/Supplier:

Fronius International GmbH
Günter Fronius Straße 1
A-4600 Wels-Thalheim
Phone.: +43 / (0)7242 / 241-0
Fax: +43 / (0)7242 / 241-3940

Office to contact for information:

TSI (TechSupport International)
Phone.: +43 / (0)7242 / 241-3440
Fax: +43 / (0)7242 / 241-3930
e-mail: welding.techsupport@fronius.com
www.fronius.com

Emergency hotline:

Austrian Anti-Poison Center +43 / (0)1 / 4064343

2. Composition/Information on the ingredients

Chemical characterization:

Description:

Mixture of the substances mentioned below with non-hazardous additions

Dangerous constituents:

> 25 % / phosphoric acid / C; R34 / CAS: 7664-38-2, EINECS: 231-633-2

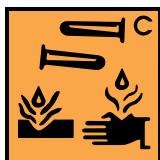
Additional information:

For the wording of the mentioned hazard notes see section 16.

3. Possible hazards

Hazards identification

C Caustic



Information concerning particular hazards for human and environment:

R 34 Causes burns

Classification system:

The classification is in accordance with the current EC lists. Further it is supplemented with information from technical literature and company information.

4. First-aid measures

General information:

Immediately remove contaminated garments

After inhalation:

Provide fresh air, consult a doctor in case symptoms develop

After skin contact:

Immediately wash off with water and soap and rinse with plenty of water

After eye contact:

Rinse opened eye for several minutes with running water and consult a doctor

After swallowing:

- Do not induce vomiting, immediately consult a doctor
- Rinse out mouth and drink plenty of water.

5. Fire-fighting measures

Suitable extinguishing agents:

- CO₂, fire-extinguishing powder or water spray jet.
- Use water spray jet or alcohol-resistant foam in the case of a blaze

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

Possibly released in the case of a fire: P₂O₅ fume

Special protective equipment for fire-fighters:

Wear self-contained respiratory protective device

Further information:

Cool threatened containers with a water spray jet.

6. Accidental release measures

Person-related safety precautions

Wear protective equipment. Keep unprotected persons away.

Measures for environmental protection:

Do not allow product to reach sewage system or any water course.

Measures for cleaning/collecting:

- Use neutralising agent.
- Recycle or dispose of in suitable containers
- Dispose of contaminated material as waste according to section 13
- Absorb with liquid-binding material (e.g. ABSODAN, sand, diatomite, all-purpose binder)

7. Handling and storage

Handling:**Information for safe handling:**

- To dilute product, always put in some water first and stir in product.
- Keep container tightly sealed.

Information about protection against explosions and fires:

- Provide emergency cooling in case there is a fire in the vicinity

Storage**Conditions required for storage rooms and vessels:**

- Provide acid-resistant floor.

Incompatible materials:

- Do not store together with alkalis (lyes).

Further information on storage conditions:

Keep container tightly sealed.

Storage class:

VCI: 8

VBF class:

void

8. Exposure controls and personal protection**Additional information about the design of technical systems:**

no further details, see section 7

Components with limit values that require monitoring at the workplace:

7664-38-2 phosphoric acid

TLV (Austria): short-term value 2 mg/ m³, long-term value 1 mg/m³

Additional information:

The lists valid during the making were used as basis.

Personal protective equipment:**General safety and hygiene measures:**

- Keep away from human and animal food and drinks.
- Immediately take off contaminated or impregnated garments.
- Wash hands before breaks and after use.
- Avoid contact with eyes or skin.

Breathing equipment:

Use breathing equipment in the case of insufficient ventilation.

Protection of hands:

Protective gloves

The glove material must be impermeable and resistant to the product / substance / preparation.

No recommendation can be made as to the glove material to be used for the product / the preparation / the chemical mixture as no relating tests were performed.

Choose glove material depending on the respective breach times, permeation rates and degradation.

Glove material:

Any selection of a suitable glove depends not only on the material but also on other quality criteria that may differ among different manufacturers. The product being a preparation composed of various substances, the resistance of glove materials cannot be calculated and must therefore be tested prior to use.

Permeation time of the glove material:

Ask the protective glove manufacturer for the relevant breach time and adhere to it.

Eye protection:

Tightly sealing safety goggles

Body protection:

- acid-resistant safety clothing
- suitable personal protective equipment
- use protective suit – protective shoes

9. Physical and chemical properties**General information:**

- | | |
|---------------|-----------|
| - Appearance: | liquid |
| - Colour: | red |
| - Odour: | odourless |

Change of physical state:

- | | |
|--------------------------------|----------------|
| - Melting point/melting range: | not determined |
| - Boiling point/boiling range: | appr. 150 °C |

Flashpoint:

not applicable

Ignition temperature:**Decomposition temperature:**

appr. 300°C (into P₂O₅)

Self-ignition:

The product is not self-igniting.

Explosion hazard:

The product is not explosive.

Density at 20°C

appr. 1.43 g/cm³

Solubility in / miscibility with water:

fully miscible

PH value at 20°C:

highly acid

10. Stability and reactivity**Thermal decomposition / conditions to avoid:**

Do not overheat to avoid thermal decomposition.

Hazardous reactions:

- reactions with alkalis (lyes)
- addition of water causes warming

Dangerous products of decomposition

void

11. Toxicological information

Acute toxicity:

LD/LC 50 values relevant for classification: 7664-38-2 phosphoric acid

- Oral / LD50 / 1530 mg/kg (rat)
- Dermal / LD50 / 2740 kg/mg (rat)

Primary irritation effects:

- on the skin: caustic effect on skin and mucous membranes
- on the eye: highly caustic effect
- sensitisation: no sensitising effect known

Additional toxicological information:

Ingestion has a highly caustic effect on the oral cavity and the pharynx and bears the risk of a perforation of the larynx or stomach.

On the basis of the calculation method set out in appendix B of the Austrian Chemicals Decree (Chemikalienverordnung) the product hazards are as follows:

- caustic

12. Ecological information**General information:**

- water hazard class 1 (self-assessment): weak hazard for waters
- Do not allow product to reach groundwater, any water course or sewage system.

13. Disposal considerations**Product:****Recommendation:**

Do not dispose of together with household waste. Do not allow product to reach sewage system.

Waste code number:

52102 acc. to ÖNORM S 2100
Acids and acid mixtures, anorganic

Disposal considerations:

- chemo-physical treatment: suitable
- biological treatment: not suitable
- thermal treatment: not suitable
- Dumping: not suitable

Uncleaned packagings:

Recommendation: Dispose of according to official regulations.

14. Transport information**Land transport ADR/RID and GGVS/GGVE (border-crossing/national):**

- ADR/RID-GGVS/E-class: 8 – caustic agents
- Kemler number: 80
- UN number: 1805
- packing group: III
- danger note: 8

cleaning electrolyte

- proper shipping name 1805 phosphoric acid, liquid

Sea transport IMDG/GGVSea:

- IMDG/GGVSea class: 8
- UN number: 1805
- label: 8
- packing group: III
- EMS number: F-A,S-B
- marine pollutant: no
- proper technical name: phosphoric acid, liquid

Air transport ICAO-TI and IATA-DGR:

- ICAO/IATA class: 8
- UN/ID number: 1805
- label: 8
- packing group: III
- proper technical name: phosphoric acid, liquid

15. Austrian and EU regulations**Labelling acc. to EEC directives:****Code letter and hazard designation of product:**

C Caustic

Hazard-determining components of labelling:

phosphoric acid

Risk phrases

34 Causes burns

Safety phrases

- 1/2 Keep locked up and out of the reach of children.
- 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- 30 Never add water to this product
- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible).
- 60 This material and its container must be disposed of as hazardous waste.

National regulations;

The classification according to the Austrian ChemG BGBl. I 53/1997 is identical with the classification by EC directives

Classification according to VbF:

void

Water hazard class:

water hazard class 1 (self-assessment): weak hazard for waters

16. Other information

The information given in this material safety data sheet are valid for the mentioned product only. It may no longer apply if the product is processed or mixed with other substances. This information is based on our present knowledge and is intended to describe the product with a view to the safety precautions to take.

Relevant risk phrases

- 34 Causes burns