



Trade name: printing electrolyte

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

**Product details:**

**Trade name:**  
printing electrolyte

**Use of the substance/preparation:**  
Printing electrolyte solution

**Manufacturer/Supplier:**  
Fronius International GmbH  
Günter Fronius Straße 1  
A-4600 Wels-Thalheim  
Phone: +43 / (0)7242 / 241-0  
Fax: +43 / (0)7242 / 241-391

**Office to contact for information:**  
Sales Division  
Tel.: +43 / (0)7242 / 241-310  
Fax: +43 / (0)7242 / 241-349

**Emergency hotline:**  
Austrian Anti-Poison Center +43 / (0)1 / 4064343

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**2. Composition/Information on the ingredients**

**Chemical characterization:**

**Description:**  
aqueous solution of ferric nitrate, 9-hydrate

**Dangerous constituents:**  
2,5 - 10 % / ferric nitrate, 9-hydrate / Xi; R36/38 / CAS: 7782-61-8, EINECS: 233-899-5

**Additional information:**  
For the wording of the mentioned hazard notes see section 16.

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**3. Possible hazards**

**Hazards identification**  
non-hazardous

**Information concerning particular hazards for human and environment:**  
In virtue of the calculation method set out in the "EC General Assessment Directive for Preparations" currently in force, this product is not subject to labelling.

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

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**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.

**After eye contact:**

Rinse opened eye for several minutes with running water. If symptoms persist, consult a doctor.

**After swallowing:**

If symptoms persist, consult a doctor.

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**5. Fire-fighting measures****Suitable extinguishing agents:**

Use extinguishing media appropriate for surroundings.

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

Possible formation of poisonous gases during heating or in fires.

**Special protective equipment for fire-fighters:**

Wear self-contained respiratory protective device

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**6. Accidental release measures****Person-related safety precautions**

Not required

**Measures for environmental protection:**

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

**Measures for cleaning/collecting:**

- Absorb with liquid-binding material (e.g. ABSODAN, sand, diatomite, all-purpose binder)
  - Dispose of contaminated material as waste according to section 13
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**7. Handling and storage****Handling:****Information for safe handling:**

Keep container tightly sealed.

**Information about protection against explosions and fires:**

No special measures required.

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

No special requirements

**Incompatible materials:**

No special measures required

**Further information on storage conditions:**

Keep container tightly sealed.

**Storage class:**

**VBF class:**  
void

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## 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:**  
The product contains no relevant quantities of substances with limit values that require monitoring at the workplace.

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

**Personal protective equipment:**

**General safety and hygiene measures:**

- Keep in mind the usual precautions for handling chemicals.
- Wash hands before breaks and after use.
- Avoid contact with eyes or skin.

**Breathing equipment:**  
No special measures required

**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:**  
Use of safety goggles is recommended for decanting.

**Body protection:**  
protective workwear

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## 9. Physical and chemical properties

**General information:**

- Appearance: liquid
- Colour: see product designation
- Odour: characteristic

**Change of physical state:**

- Melting point/melting range: not determined

- Boiling point/boiling range: 100 ° C

**Flashpoint:**  
not applicable

**Self-ignition:**  
The product is not self-igniting.

**Explosion hazard:**  
The product is not explosive.

**Density at 20°C**  
appr. 1.07 g/cm<sup>3</sup>

**Solubility in / miscibility with water:**  
fully miscible

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## 10. Stability and reactivity

**Thermal decomposition / conditions to avoid:**  
No decomposition when used in conformity with the intended use.

**Hazardous reactions:**  
no dangerous reactions known

**Dangerous products of decomposition:**  
void

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## 11. Toxicological information

**Acute toxicity:**

**Primary irritation effects:**

- |                  |                             |
|------------------|-----------------------------|
| - on the skin:   | no irritating effect        |
| - on the eye:    | no irritating effect        |
| - sensitisation: | no sensitising effect known |

**Additional toxicological information:**

In virtue of the calculation method set out in the "EC General Assessment Directive for Preparations" currently in force, this product is not subject to labelling.  
Our experience and all information known to us indicate that the product has no harmful effects when it is handled in a safe manner and used according to its intended use.

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## 12. Ecological information

**General information:**  
Do not allow product to reach groundwater, any water course or sewage system.

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## 13. Disposal considerations

**Product:**

**Recommendation:**  
Have waste collected or dispose of at hazardous waste collection point.

**Waste code number:**  
59305 acc. to ÖNORM S 2100  
laboratory waste and chemical residues

**Disposal considerations:**

- |                            |                       |
|----------------------------|-----------------------|
| - chemo-physical treatment | suitable              |
| - biological treatment:    | not suitable          |
| - thermal treatment:       | conditioning required |
| - Dumping:                 | not suitable          |

**Uncleaned packagings:**

Recommendation: Dispose of according to official regulations.

**Recommended cleaning agent:**

water, if necessary add cleaning agent

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

ADR/RID-GGVS/E-class: -

**Further transport information:**

Not classified as dangerous goods for transport.

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**15. Austrian and EU regulations****Labelling acc. to EEC directives:**

In virtue of the calculation method set out in the "EC General Assessment Directive for Preparations" currently in force, this product is not subject to labelling.

Keep in mind the usual precautions for handling chemicals.

**National regulations:**

The substance or preparation is not hazardous according to the provisions of the chemical law.

**Classification according to VbF:**

void

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**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**

36/38 Irritates the eye and the skin