



Printing date 18.07.2006

Reviewed on 18.07.2006

1 Identification of substance· **Product details**· **Trade name:** SurTec 830 I· **Article number(s):** 4089· **Manufacturer / Supplier:**SurTec Deutschland GmbH
SurTec-Straße 2
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· **Informing department:**

Technical central

Tel.: +49-6251-171-700, Fax: +49-6251-171-800

· **Emergency information:** Poison Information Mainz (Germany), Tel.: +49-6131-19240**2 Composition/Data on components**· **Chemical characterization:** Mixture of the substances listed below with (harmless) additions.· **Dangerous components:**

CAS: 7786-81-4 Nickel sulphate

EINECS: 232-104-9 Carc. Cat. 3; Xn, N; R 22-40-42/43-50/53

40 - 60%

· **Application:** Nickel Concentrate for Electroless Nickel**3 Hazards identification**· **Hazard designation:**

Xn Harmful

N Dangerous for the environment

· **Information pertaining to particular dangers for man and environment:**

R 22 Harmful if swallowed.

R 40 Limited evidence of a carcinogenic effect.

R 42/43 May cause sensitisation by inhalation and skin contact.

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4 First aid measures· **General information:**

Instantly remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

In case of irregular breathing or respiratory arrest provide artificial respiration.

· **after inhalation:**

Supply fresh air and call for doctor for safety reasons.

In case of unconsciousness bring patient into stable side position for transport.

· **after skin contact:**

Instantly wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· **after eye contact:** Rinse opened eye for several minutes under running water. Then consult doctor.· **after swallowing:** Drink copious amounts of water and provide fresh air. Instantly call for doctor.**5 Fire fighting measures**· **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.· **Special hazards caused by the material, its products of combustion or flue gases:**

After evaporation of water formation of following substances is possible:

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· **Protective equipment:**

Do not inhale explosion gases or combustion gases.
Put on breathing apparatus.

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* **6 Accidental release measures**

· **Person-related safety precautions:**

Ensure adequate ventilation.
Wear protective clothing.

· **Measures for environmental protection:**

Do not allow product to reach sewage system, water bodies, ground or soil.
If material reaches soil, water bodies or sewage system inform authorities responsible for such cases.

· **Measures for cleaning/collecting:**

Ensure adequate ventilation.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.

* **7 Handling and storage**

· **Handling**

· **Information for safe handling:**

Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.

· **Information about protection against explosions and fires:** No special measures required.

· **Storage**

· **Requirements to be met by storerooms and containers:**

Prevent any penetration into the ground.

· **Further information about storage conditions:**

Protect from frost.

The stability which is noticed on the label is only duty by right storage of the product.

· **Recommended storage temperature:** Not store under +6 °C - sensitive to cold

* **8 Exposure controls and personal protection**

· **Components with critical values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· **Additional information:** The lists that were valid during the compilation were used as basis.

· **Personal protective equipment**

· **General protective and hygienic measures:**

Do not eat, drink or smoke while working.
Keep away from foodstuffs, beverages and food.
Instantly remove any soiled and impregnated garments.
Wash hands during breaks and at the end of the work.
Use skin protection cream for preventive skin protection.
Avoid contact with the eyes and skin.
Do not inhale gases/fumes/aerosols.

· **Breathing equipment:** Not necessary if room is well-ventilated.

· **Protection of hands:** PVC or PE gloves

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Eye protection:** Tightly sealed safety glasses

· **Body protection:** Impervious protective clothing

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9 Physical and chemical properties

· General Information

Form: liquid
Colour: green
Odour: characteristic

· Change in condition

Boiling point/Boiling range: > 100°C

- **Flash point:** not applicable
- **Danger of explosion:** Product is not explosive.
- **Density at 20°C:** 1.27 g/cm³
- **Solubility in / Miscibility with Water:** fully miscible
- **pH-value at 20°C:** ~ 2

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Dangerous reactions:** No dangerous reactions known.
- **Dangerous products of composition:** No dangerous decomposition products known.

11 Toxicological information

- **Acute toxicity**
- **LD/LC50 values that are relevant for classification:**
7786-81-4 Nickel sulphate
Oral LD50 300 mg/kg (rat)
- **Primary irritant effect:**
 - **on the skin:** No irritant effect.
 - **on the eye:** No irritant effect.
- **Sensitization:** Sensitizing effect by inhalation, or by skin contact is possible by prolonged exposure.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:
Harmful
Irritant

12 Ecological information

- **General notes:**
Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.
Danger to drinking water if even small quantities leak into soil.

13 Disposal considerations:

- **Product:**
- **Recommendation:**
Must be specially treated under adherence to official regulations.
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Waste disposal key number:**
The mentioned waste codes are recommendations based on the product application as suggested by the manufacturer. Special applications and special disposal conditions at the applicer's place may however require another waste code.
- **European waste catalogue**
11 01 09 sludges and filter cakes containing dangerous substances

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Uncleaned packagings:

Recommendation:

Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.

Disposal must be made according to official regulations.

- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

14 Transport information:

• **Land transport ADR/RID (cross-border)**

• **ADR/RID Class:** 9 (M6) Miscellaneous dangerous substances and articles.

• **Kemler Number:** 90

• **UN-Number:** 3082

• **Packaging group:** III

• **Label:** 9

• **Designation of goods:** 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Nickel sulphate hexahydrate)

• **Maritime transport IMDG**

• **IMDG Class:** 9

• **UN Number:** 3082

• **Label:** 9

• **Packaging group:** III

• **Correct technical name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Nickel sulphate)

• **Air transport ICAO-TI and IATA-DGR**

• **ICAO/IATA Class:** 9

• **UN/ID Number:** 3082

• **Label:** 9

• **Packaging group:** III

• **Correct technical name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Nickel sulphate)

15 Regulatory information

• **Designation according to EC guidelines:**

The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV).

• **Code letter and hazard designation of product:**



Xn Harmful

N Dangerous for the environment

• **Hazard-determining component(s) of labelling:**

Nickel sulphate

• **Risk phrases:**

22 Harmful if swallowed.

40 Limited evidence of a carcinogenic effect.

42/43 May cause sensitisation by inhalation and skin contact.

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

• **Safety phrases:**

23 Do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer).

36/37 Wear suitable protective clothing and gloves.

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- 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
 - 57 Use appropriate container to avoid environmental contamination.
 - 60 This material and its container must be disposed of as hazardous waste.

• **National regulations**

• **Additional classification according to Decree on Hazardous Materials, Annex II:**

Can cause cancer.

Preparation with salts of nickel, may cause cancer in form of inhaled spray/vapour or fog.

By correct application of these preparations, immersion process, may cause danger impossible.

• **Information about limitation of use:**

Employment restrictions concerning young persons must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

Observe GefStoffV § 15.

* **16 Other information:**

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

• **Relevant R-phrases**

22 Harmful if swallowed.

40 Limited evidence of a carcinogenic effect.

42/43 May cause sensitisation by inhalation and skin contact.

50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

• **Department issuing MSDS:** Product Safety Department

• **Contact:**

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Mr. Dipl.-Ing. O. Penz, Tel.: +49-6251-171-725 (Deputy)

• **Output nr.:**

• **Reviewed:** Changes have been signified with a "*" on the left side of the sheet.