

**SAFETY DATA SHEET**  
according to Regulation (EC) No. 1907/2006

**CP\$&+\$ v&' RS &% !&\* - -**  
**RS REACH revision date 01/01/12**

Revision Date 30.11.2010

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

**Product Information**

Catalogue No.: 216-2699  
Product name: Ferric Stain Remover  
Use of the Substance/Mixture: Chemical for Cleaning

Company: RS Components Ltd., Birchington Road, Corby, Northants. NN17 9RS  
Emergency telephone: +44 (0) 1536 402888 (8am to 8pm). Fax: +44 (0) 1536 401588  
email: technical.help@rs-components.com

**2. Hazards identification**

**GHS Classification**

Acute toxicity, Category 4, Dermal H312: Harmful in contact with skin.  
Acute toxicity, Category 4, Oral H302: Harmful if swallowed.

**EC Classification**

Xn; R21/22

For the full text of the R-phrases mentioned in this Section, see Section 16.

**3. Composition/information on ingredients OXALIC ACID**

Formula	HOOC-COOH	C <sub>2</sub> H <sub>2</sub> O <sub>4</sub> (Hill)
CAS-No.	144-62-7	
Index-No.	607-006-00-8	
EC-No.	205-634-3	
Molar mass	90,03 g/mol	

**4. First aid measures**

After inhalation: fresh air.

After skin contact: wash off with plenty of water. Remove contaminated clothing. Get medical attention.

After eye contact: rinse out with plenty of water with the eyelid held wide open. Call in ophthalmologist if necessary.

After swallowing: immediately make victim drink water (two glasses at the most). Consult a physician.

**5. Fire-fighting measures**

*Suitable extinguishing media*

Water, Carbon dioxide (CO<sub>2</sub>), Foam, Dry powder

*Specific hazards during fire fighting*

Combustible material

Development of hazardous combustion gases or vapours possible in the event of fire.

*Special protective equipment for fire-fighters*

Do not stay in dangerous zone without self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

*Further information*

Prevent fire extinguishing water from contaminating surface water or the ground water system.

---

## 6. Accidental release measures

*Personal precautions*

Avoid substance contact. Avoid inhalation of dusts. Ensure adequate ventilation.

*Environmental precautions*

Do not empty into drains.

*Methods for cleaning up*

Take up dry. Forward for disposal. Clean up affected area. Avoid generation of dusts.

---

## 7. Handling and storage

### Handling

*Advice on safe handling*

Observe label precautions.

### Storage

*Further information on storage conditions*

Tightly closed. Dry.

Store at +15°C to +25°C.

---

## 8. Exposure controls/personal protection

### Personal protective equipment

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

*Respiratory protection*

required when dusts are generated.

Recommended Filter type: Filter P 2 (acc. to DIN 3181) for solid and liquid particles of harmful substances

*Hand protection*

full contact:

Glove material:	Nitrile rubber
Glove thickness:	0,11 mm
Break through time:	> 480 min

splash contact:

Glove material:	Nitrile rubber
Glove thickness:	0,11 mm
Break through time:	> 480 min

The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

This recommendation applies only to the product stated in the safety data sheet and supplied by us as well as to the purpose specified by us. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves

*Eye protection*  
Safety glasses

*Protective measures*  
Protective suit

*Hygiene measures*  
Immediately change contaminated clothing. Apply skin- protective barrier cream. Wash hands and face after working with substance.

---

## 9. Physical and chemical properties

Form	solid
Colour	white
Odour	odourless
pH	ca. 1 at 100 g/l 20 °C
Viscosity, dynamic	no data available
Melting point	189 °C (decomposition)
Boiling point	no data available
Ignition temperature	no data available
Flash point	not applicable, (decomposition)
Oxidizing properties	no data available
Flammability	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	21,5 hPa at 50 °C
Relative vapour density	no data available
Density	1,9 g/cm <sup>3</sup> at 20 °C

Catalogue No.: 216-2699

Product name: FERRIC STAIN REMOVER

CP\$&+\$ v&' RS &% !&\* - -

---

Bulk density	ca.750 kg/m <sup>3</sup>
Solubility/qualitative	no data available
Water solubility	220 g/l at 25 °C (experimental)
Partition coefficient: n-octanol/water	log Pow: -0,81 (30 °C) (IUCLID) No bioaccumulation is to be expected (log Pow <1).
Evaporation rate	no data available

---

## 10. Stability and reactivity

### *Conditions to avoid*

Strong heating (decomposition).

### *Materials to avoid*

Risk of explosion with:

chlorates, sodium hypochlorite, Strong oxidizing agents, silver, salts of oxyhalogenic acids

Exothermic reaction with:

bases, Ammonia, Mercury

### *Hazardous decomposition products*

no information available

### *Thermal decomposition*

> 157 °C

### *Further information*

sensitive to moisture

The following applies in general to flammable organic substances and preparations: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

---

## 11. Toxicological information

### *Acute oral toxicity*

LD50 rat

Dose: 375 mg/kg

(IUCLID)

Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract., Rapid absorption.

### *Acute dermal toxicity*

LD50 rabbit

Dose: 20.000 mg/kg

(IUCLID) (Regulation (EC) No 1272/2008, Annex VI)

absorption

### *Skin irritation*

Irritations tissue damage (Regulation (EC) No 1272/2008, Annex VI)

*Eye irritation*

rabbit

Result: Severe irritations  
(IUCLID) (Regulation (EC) No 1272/2008, Annex VI)

*Genotoxicity in vitro*

Ames test

Result: negative  
(Lit.)

*Further information*

Systemic effects:

After absorption:

agitation, spasms, Nausea, Vomiting, cardiovascular disorders, collapse, disturbed electrolyte balance.

Secondary products cause:

Damage of:

Kidney

Other information

The following applies to oxalates in general: nausea and vomiting after swallowing. Mucosal irritations, coughing, and dyspnoea after inhalation. Systemic effect: drop in the blood calcium level, toxic effect on kidneys, cardiovascular disorders.

Further data:

Handle in accordance with good industrial hygiene and safety practice.

---

## 12. Ecological information

### Ecotoxicity

*Toxicity to fish*

LC50

Species: Leuciscus idus (Golden orfe)

Dose: 160 mg/l

Exposure time: 48 h

(IUCLID)

*Toxicity to daphnia and other aquatic invertebrates.*

EC50

Species: Daphnia magna (Water flea)

Dose: 137 mg/l

Exposure time: 48 h

(IUCLID)

### Persistence and degradability

*Biodegradability*

40 %

Exposure time: 5 d

(IUCLID)

*Biochemical Oxygen Demand (BOD)*

160 mg/g (5 d)

(IUCLID)

*Chemical Oxygen Demand (COD)*

180 mg/g

(IUCLID)

*Theoretical oxygen demand (ThOD)*  
180 mg/g

*Partition coefficient: n-octanol/water*  
log Pow: -0,81 (30 °C)  
(IUCLID) No bioaccumulation is to be expected (log Pow <1).

*Additional ecological information*  
Do not allow to enter waters, waste water, or soil!

---

### 13. Disposal considerations

*Product*  
Chemicals must be disposed of in compliance with the respective national regulations.

*Packaging*  
Product packaging must be disposed of in compliance with the local-specific regulations

---

### 14. Transport information:

**NOT RESTRICTED**

X  
X  
X  
X  
X  
X

---

### 15. Regulatory information

#### GHS-Labeling

##### *Hazard pictograms*



*Signal word*  
Warning

*Hazard statements*  
H302 + H312: Harmful if swallowed or in contact with skin.

*Precautionary statements*  
P262: Do not get in eyes, on skin, or on clothing.  
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.

**Reduced labelling (≤125 ml)**

*Hazard pictograms*



*Signal word*  
Warning

*Index-No.* 607-006-00-8

**Labelling according to EC Directives**

Symbol(s):	Xn	Harmful
R-phrase(s):	21/22	Harmful in contact with skin and if swallowed.
S-phrase(s):	24/25	Avoid contact with skin and eyes.
EC-No.	205-634-3	EC Label

**Reduced labelling (≤125 ml)**

Symbol(s):	Xn	Harmful
R-phrase(s):	21/22	Harmful in contact with skin and if swallowed.
S-phrase(s):	24/25	Avoid contact with skin and eyes.

**National legislation**

Storage class VCI: 8 A Combustible substances, corrosive

Major Accident Hazard Legislation: 96/82/EC Update: 2003  
Directive 96/82/EC does not apply

Other regulations: Take note of Dir 94/33/EC on the protection of young people at work. Take note of Dir 92/85/EEC on the safety and health at work of pregnant workers.

---

**16. Other information**

**Full text of R-phrases referred to under sections 2 and 3**

R21/22 Harmful in contact with skin and if swallowed.

Regional representation: This information is given on the authorised Safety Data Sheet for your country.

---

*The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.*