

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 30.08.2017

Version number 2

- **Product identifier**
- **Trade name:** FERRIC SULPHATE SOLUTION
- **Article number:** PL0038
- **CAS Number:** 10028-22-5/2
- **EC number:**
233-072-9
- **Relevant identified uses of the substance or mixture and uses advised against Industrial use**
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Johannesburg
1 Berrange Road
Wadeville, Germiston
Tel: 011-821 3300

Port Elizabeth
127 Grahamstown Road
Deal Party, Port Elizabeth
Tel: 041-403 1000

Cape Town
54 Killarney Avenue
Killarney Gardens, Milnerton, Cape Town
Tel: 021-550 8100

Jacobs
150 Quality Street,
Jacobs, Durban
Tel: 031-468 5424

Mobeni
90 Pendlebury Road,
Mobeni
Tel: 031-469 0165
- **Further information obtainable from:** Protea Chemicals
- **Emergency telephone number:**
08610 OMNIA or
08610 66642

2 Hazards identification

- **Classification of the substance or mixture**



corrosion

Skin Corr. 1C H314 Causes severe skin burns and eye damage.



Acute Tox. 4 H302 Harmful if swallowed.

Eye Irrit. 2A H319 Causes serious eye irritation.

Acute Tox. 5 H333 May be harmful if inhaled.

- **Label elements**
- **GHS label elements**

The substance is classified and labelled according to the Globally Harmonised System (GHS).

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· **Hazard pictograms**



GHS05 GHS07

· **Signal word** *Danger*

· **Hazard statements**

Harmful if swallowed.

May be harmful if inhaled.

Causes severe skin burns and eye damage.

· **Precautionary statements**

Do not breathe dusts or mists.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** *Not applicable.*

· **vPvB:** *Not applicable.*

3 Composition/information on ingredients

· **Chemical characterisation:** *Substances*

· **CAS No. Description**

FERRIC SULPHATE SOLUTION

· **Identification number(s)**

· **EC number:** *233-072-9*

4 First aid measures

· **Description of first aid measures**

· **After inhalation:**

Remove to fresh air. In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:**

Immediately wash with water and soap and rinse thoroughly. Remove contaminated clothing. Flush affected areas with plenty of water and soap.

· **After eye contact:**

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

· **After swallowing:** *If symptoms persist consult doctor.*

· **Information for doctor:**

· **Most important symptoms and effects, both acute and delayed** *No further relevant information available.*

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

5 Firefighting measures

· **Extinguishing media**

· **Suitable extinguishing agents:**

CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

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Protea
Chemicals

A member of the Omnia Group
"more than just a chemical supplier"
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- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Use breathing apparatus with independent air supply (Isolated)

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective gear. Do not inhale the material or its combustion products. Go against the wind and keep out of low areas. Evacuate personnel to safe area.
- **Environmental precautions:**
Do not allow to enter sewers/ surface or ground water. Should not be released into the environment.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Transfer into suitable containers. To be disposed of in compliance with existing regulations. After cleaning, flush away traces with water.
- **Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
No special precautions are necessary if used correctly. Avoid contact with skin, eyes and clothing.
- **Information about fire - and explosion protection:**
Put on appropriate personal protective equipment. Keep away from open flames, shut of the production of sources of ignition. Electricity: static electricity, electricity sparks, heat. Do not breathe vapor or mist. No smoking.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Observe the rules usually applicable when handling chemicals.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed in a dry well-ventilated place.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:**
Ensure eyewash stations and safety showers are close to the workstation location.
- **Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists valid during the making were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

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- **Respiratory protection:**
In case of dust formation, wear micro dust mask. Use respiratory equipment with suitable filter or wear a self contained respiratory apparatus.
- **Protection of hands:**
Due to missing tests no recommendation to the glove material can be given for the product/the preparation/ the chemical mixture.



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **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.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Solution
Colour:	Dark red-brown
Odour:	Odourless
Odour threshold:	Not determined.
- **pH-value:** Not determined.
- **Change in condition**

Melting point/freezing point:	-18 °C
Initial boiling point and boiling range:	104-113 °C
- **Flash point:** Not applicable.
- **Flammability (solid, gas):** Not applicable.
- **Ignition temperature:**
- **Decomposition temperature:** Not determined.
- **Auto-ignition temperature:** Not determined.
- **Explosive properties:** Product does not present an explosion hazard.
- **Explosion limits:**

Lower:	Not determined.
Upper:	Not determined.
- **Vapour pressure:** Not determined.

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· Density at 20 °C:	1,49-1,52 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with water:	Not determined.
· Partition coefficient: n-octanol/water:	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** Alkalis, copper, mild steel and oxidising agents.
- **Hazardous decomposition products:** Burning may produce sulfur and iron oxides.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**

· **LD/LC50 values relevant for classification:**

Oral	LD50	500 mg/kg (rat)
Inhalative	LC50/4 h	510 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Irritant to skin and mucous membranes.
- **Serious eye damage/irritation** Irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.

12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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· **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number · ADR, IMDG, IATA	UN3264
· UN proper shipping name · ADR · IMDG, IATA	3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (FERRIC SULPHATE SOLUTION) CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (FERRIC SULPHATE SOLUTION)
· Transport hazard class(es) · ADR, IMDG, IATA	
	
· Class · Label · Subsidiary risk	8 Corrosive substances. 8 -
· Packing group · ADR, IMDG, IATA	III
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user · Stowage Category · Stowage Code · ERG No.	Warning: Corrosive substances. A SW2 Clear of living quarters. 154
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· IMDG · Limited quantities (LQ)	5L

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· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (FERRIC SULPHATE SOLUTION), 8, III

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **GHS label elements**
The substance is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms**



GHS05 GHS07

- **Signal word** *Danger*
- **Hazard statements**
Harmful if swallowed.
May be harmful if inhaled.
Causes severe skin burns and eye damage.
- **Precautionary statements**
Do not breathe dusts or mists.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Immediately call a POISON CENTER/doctor.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** *Substance is not listed.*
- **Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

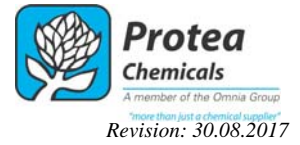
16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
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
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 5: Acute toxicity – Category 5

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Skin Corr. 1C: Skin corrosion/irritation – Category 1C
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

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