



SAFETY DATA SHEET

Date of issue: 22/02/05

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

Identification of the product

Catalogue No: 30605

ID No.: 1037900

Product name: **Zinc chloride GPR**

Use of the substance/preparation: Chemical reagent

Manufacturer/supplier identification

Company: VWR International Ltd
Hunter Boulevard, Magna Park, Lutterworth, Leicestershire, England, LE17 4XN
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2. Composition/information on ingredients

Chemical characterization

Inorganic salt

Product name: Zinc chloride

CAS number: 7646-85-7

EC-No.: 231-592-0

EC Index No.: 030-003-00-2

Molecular formula: ZnCl_2 , = 136.29 g/mol

3. Hazards identification

Harmful if swallowed. Causes burns. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. First aid measures

- Eye contact: Irrigate thoroughly with water for at least 10 minutes. OBTAIN MEDICAL ATTENTION.
- Inhalation: Remove from exposure, rest and keep warm. In severe cases obtain medical attention.
- Skin contact: Wash off skin thoroughly with water. Remove contaminated clothing and wash before re-use. Unless contact has been slight, OBTAIN MEDICAL ATTENTION.
- Ingestion: Wash out mouth thoroughly with water and give plenty of water to drink. OBTAIN MEDICAL ATTENTION.

5. Fire-fighting measures

Special risks:

Not combustible. May evolve toxic fumes in fire. (hydrochloric acid)

Suitable extinguishing media:

To suit environment. Prevent fire fighting water entering watercourses or ground-water.

6. Accidental release measures

Wear appropriate protective clothing.

Mix with sand, transfer carefully to container and arrange removal by disposal company. Wash site of spillage thoroughly with water and detergent.

For large spillages liquids should be contained with sand or earth and both liquids and solids transferred to salvage containers. Any residues should be treated as for small spillages.

7. Handling and storage

Handling:

Do not use metal equipment or containers.

Avoid generation of dusts. Wash hands and face thoroughly after working with material. Contaminated clothing should be removed and washed before re-use.

Use appropriate containment to avoid environmental contamination.

Storage:

Store at room temperature (15 to 25°C recommended). Keep well closed and protected from direct sunlight and moisture.

8. Exposure controls/personal protection

UK Exposure Limits:

WEL - Zinc chloride, fume:

Long term: 1 mg/m³ Short term: 2 mg/m³

Personal protective equipment:

As appropriate to the situation and the quantity handled. Engineering methods to control or prevent exposure are preferred. Methods could include process enclosure or mechanical ventilation.

- Respirator: Dust respirator when dusts are generated.

- Ventilation: Extraction hood when dusts are generated.

- Gloves: Rubber or plastic. Gloves subject to permeation or any sign of degradation must be removed and replaced immediately.

- Eye Protection: Goggles or face-shield

- Other Precautions: Plastic apron, sleeves, boots - if handling large quantities

9. Physical and chemical properties

General information:

Form:	solid
Colour:	colourless to white
Odour:	slightly pungent

Health, safety and environmental information:

Melting temperature	262°C
Boiling temperature	732°C
Density(g/ml)	2.91
Bulk density:	~1.4-1.8g/ml
Solubility in water	Very soluble (4320g/l, 25°C)
pH value	~5 (100g/l, 20°C)
Flammability:	Not combustible.

10. Stability and reactivity

sensitive to moisture.

Unsuitable working materials: various metals.

No data

11. Toxicological information

- After contact with substance: Burns of: eyes, skin, mucous membranes.
- After ingestion: Irritation of mucous membranes in the mouth, pharynx, oesophagus, and gastrointestinal tract.
- After the uptake of large quantities: pain, vomiting, diarrhoea, drop in blood pressure, cardiovascular disorders, collapse.
- When dusts are generated: damage to respiratory tract. Inhalation may lead to the formation of oedemas in the respiratory tract.

The appearance of symptoms may be delayed.

Further data

LD50 350 mg/kg oral, r a t .

LClo 2 mg/l/10min inhalation, r a t .

The following applies to zinc compounds in general: only slightly absorbable via the gastrointestinal tract. Astringent effect on mucous membranes. Metal-fume fever after inhalation of large quantities.

Properties that cannot be excluded: Evidence of reproductive effects.

12. Ecological information

A harmful effect on aquatic organisms cannot be excluded in the event of improper handling or disposal.

Further ecological data:

The following applies to zinc and its compounds in general: Inorganic zinc salts have a bactericidal effect. From >10mg Zn/l on, the bacteriological self-purification of water is inhibited or suppressed. Toxic for water organisms. Lethal for fish from 0.1 mg/l in soft water. Fish toxicity: LC50 (L.idus) 21 mg/l (ZnCl₂); zinc ions: toxic to Daphnia magna from 0.3 mg/l.

Contamination of ground water creates a risk to drinking water supplies.

Remarks:

Do not allow to enter drinking water supplies, waste water, or soil!

13. Disposal considerations

Chemical residues are generally classified as hazardous or special waste, and as such are covered by regulations which vary according to location. Contact your local waste disposal authority for advice, or pass to a chemical disposal company. Rinse out empty containers thoroughly before returning for recycling.

14. Transport information

UN-No.: 2331

Class: 8

Packaging group: III

Proper shipping name: ZINC CHLORIDE, ANHYDROUS

15. Regulatory information

Labelling according to EC directives

Symbol(s): C N Corrosive. Dangerous for the environment.

R-phrases: R22-34-50/53

Harmful if swallowed. Causes burns. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases: S26-36/37/39-45-60-61

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). This material and its container must be disposed of as hazardous waste. Avoid release to the environment. Refer to special instructions/Safety data sheets.

EC-No.: 231-592-0

Local Regulations

Within the UK, the use of this material must be assessed under the Control of Substances Hazardous to Health (COSHH) regulations.

16. Other information

In TSCA Inventory.

Revision.

Supersedes edition of: 06/07/99

Reason for alteration: Changes in Section : 3,4,6,12,15

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