

Revision: 1.1

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Section 1. Identification

1.1 Product Identifier 0762

Product Name ZINC CHLORIDE ANHYDROUS pure

CAS Number 7646-85-7

REACH Registration No 01-2119472431-44-XXXX

Molecular Formula ZnCl_2 =136.29

1.2 Relevant identified uses of the substance or mixture & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier Vickers Laboratories Ltd



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UNITED KINGDOM

Phone 44 0113 2362811
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1.4 Emergency Telephone (08:00-16:30) +44(0) 113 2362811 (24hr) 112 (Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Skin corrosion/irritation, category 1B

Acute toxicity, category 4 (oral)

Spec target organ tox - single, category 3

Hazard to aquatic environment, category 1

Hazard to aquatic environment, category 1

H314: Causes severe skin burns and eye damage.

H302: Harmful if swallowed.

H335: May cause respiratory irritation.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms



Hazard Statements	Harmful if swallowed. Causes severe skin burns and eye damage. Very toxic to aquatic life with long lasting effects. May cause respiratory irritation.
Precautionary Statements	Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves / protective clothing / eye protection / face protection. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/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 and continue rinsing.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Zinc chloride	7646-85-7	231-592-0	01-2119472431-44-XXXX	>98%	Skin Corr. 1B, Acute Tox. 4 (O), STOT SE 3 (I), Aquatic Acute 1, Aquatic Chronic 1

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. OBTAIN MEDICAL ATTENTION.
Skin	Wash off skin thoroughly with water. If discomfort persists OBTAIN MEDICAL ATTENTION.
Inhalation	Remove from exposure.
Ingestion	Wash out the patients mouth thoroughly with water. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

4.2 Most important symptoms and effects, both acute & delayed.

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed.

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Consider what other flammable materials are present and act accordingly.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards	May evolve toxic fumes if involved in a fire.
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5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.
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Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Use approved personal protective equipment.
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6.2 Environmental precautions

Environmental	Keep material out of sewers, storm drains, surface waters and soil. Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs.
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6.3 Methods and material for containment and cleaning up

Major Spillage	Shovel/sweep up into container for removal Wash area down with copious amounts of water.
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Minor Spillage

Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains dust concentrations to a minimum.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage . Protect against ingress of moisture.

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits	
			Long Term (8hr TWA)	Short Term 15min period)
Zinc chloride	7646-85-7	>98%	-	-

Exposure data source(s) No occupational exposure data currently available.

8.2 Exposure controls

Respiratory Protection	If process creates significant amounts of dust use L.E.V. or wear suitable dust mask.
Hand Protection	Wear gloves.
Eye Protection	Use tightly fitting chemical splash proof glasses or goggles.
Skin Protection	Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.
Special Hazards	No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	White deliquescent crystalline material.
Odour	No specific odour.
pH	5 @ 20°C solution.
Boiling Point	732°C
Melting Point	282°C
Flash Point	Not applicable
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable
Auto Ignition	Not applicable
Explosive Properties	No.
Oxidising Properties	No.
Vapour Pressure	Not applicable
Relative Density	2.9070
Water Solubility	43%

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1	Reactivity	No data available.
10.2	Chemical Stability	Stable under normal conditions
10.3	Possibility of hazardous reactions	No data available.
10.4	Conditions to Avoid	Excessive heating.
10.5	Incompatible Materials	Water, material is very deliquescent. Mixtures with powdered zinc are flammable.
10.6	Hazardous Decomposition Products	Will decompose to emit toxic and irritant fumes of hydrogen chloride.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Contact with the solid or dust will be extremely irritating to eyes and can cause chemical eye burns.
Skin	Contact with the solid or dust will cause burns. It is an irritant to the skin producing dermatitis.
LD50 Skin	Not available
Ingestion	Ingestion will cause severe mouth burns, and if swallowed extensive damage to the oesophagus. Harmful if swallowed.
LD50 Oral	350mg/kg Rat
Inhalation	Inhalation of dust will produce severe irritation of the eyes, nose, throat and respiratory tract.
LD50 Inhalation	Not available
TCLo	2mg/l
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	May be a mutagen.
Reproductive Effects	None identified.

Section 12. Ecological

12.1	Toxicity	Not biodegradable : highly water contaminating. Very Toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment.
	LC50 Algal	Not available
	LC50 Crustacea	Not available
	LC50 Fish	Not available
12.2	Persistence and degradability	No data available.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	No data available.
12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Dispose of to a licensed land fill site.
Contaminated Packaging	Wash out containers with water. Use a licensed waste disposer.

Section 14. Transport Information

14.1 UN Number	2331
14.2 Proper Shipping Name	Zinc chloride, anhydrous
14.3 Transport classes	
UN classification	8
Subsidiary hazard(s)	None
Transport category	3
ADR Hazard ID	80
Tunnel Restriction Code	E
14.4 Packing Group	III
14.5 Environment hazards	See section 12.
14.6 Special precautions for user	No special precautions required.
14.7 Transport in bulk	Not transported in bulk.



Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for substance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification Skin corrosion/irritation, category 1B; Acute toxicity, category 4 (oral); Spec target organ tox - single, category 3; Hazard to aquatic environment, category 1; Hazard to aquatic environment, category 1

Signal word Danger

Hazard Pictograms



Hazard Statements H302, H314, H410, H335
Harmful if swallowed. Causes severe skin burns and eye damage. Very toxic to aquatic life with long lasting effects. May cause respiratory irritation.

Precautionary Statements P264, P270, P280, P301+P330+P331, P303+P361+P353, P305+P351+P338
Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves / protective clothing / eye protection / face protection. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/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 and continue rinsing.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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