



Material Safety Data Sheet (MSDS)

• Zinc Chloride

Dongtai Coastal Zinc Industry Group Co., Ltd.

Section 1 Product and Company Identification

> Product Identifier

Product Name	Zinc Chloride
Synonyms	-
CAS No.	7646-85-7
EC No.	231-592-0
Molecular Formula	ZnCl ₂

> Details of the Supplier of the Safety Data Sheet

Applicant Name	Dongtai Coastal Zinc Industry Group Co., Ltd.
Application Address	Xin Cao Xin Cun Gong Ye Qu, Dongtai City, Yancheng City, Jiangsu Province
Applicant Post Code	224200
Applicant Telephone	+86-21-61057428
Applicant Fax	+86-21-61057428
Applicant E-mail	info@coastalzinc.com
Supplier Name	Dongtai Coastal Zinc Industry Group Co., Ltd.
Supplier Address	Xin Cao Xin Cun Gong Ye Qu, Dongtai City, Yancheng City, Jiangsu Province
	224200
Supplier Post Code	
Supplier Telephone	+86-21-61057428
Supplier Fax	+86-21-61057428



Supplier E-mail

info@coastalzinc.com

> Emergency Phone Number

Emergency Phone Number +86-21-61057428

Section 2 Hazards Identification

Hazard class and label elements of the product according to GHS (the seventh revised edition):

> GHS Hazard Class

Acute Toxicity – Oral	Category 4
Skin	Category 1
Corrosion/Irritation	
Eye Damage/Irritation	Category 1
Hazardous To The	
Aquatic Environment – Short-Term (Acute) Hazard	Category 1
Aquatic Environment – Long-Term (Chronic) Hazard	Category 1

> GHS Label Elements

Pictogram



Signal Word

Danger**> Hazard Statements**

H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

> Precautionary Statements

Prevention

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Response

P310	Immediately call a POISON CENTER/doctor.
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P330	Rinse mouth.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P301+P312	IF SWALLOWED: Call a POISON CENTER/ doctor, if you feel unwell.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage	
P405	Store locked up.
Disposal	
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 3 Composition/Information on Ingredients

Component	Concentration (weight percent %)	CAS No.	EC No.
Zinc chloride	≥ 98	7646-85-7	231-592-0

Section 4 First Aid Measures

> Description of First Aid Measures

General Advice	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Skin Contact	Take off contaminated clothing and shoes immediately. Wash off with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Ingestion	Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.
Inhalation	Move victim into fresh air. If breathing is difficult, give oxygen. Do not use mouth to mouth resuscitation if victim ingested or inhaled the substance. If not breathing, give artificial respiration and consult a physician immediately.
Protecting of First-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

> Most Important Symptoms and Effects, both Acute and Delayed

- 1 Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.



> Indication of Any Immediate Medical Attention and Special Treatment Needed

- 1 Treat symptomatically.
- 2 Symptoms may be delayed.

Section 5 Fire Fighting Measures

> Extinguishing Media

Suitable Extinguishing

Media Dry chemical, carbon dioxide or alcohol-resistant foam.

Unsuitable Extinguishing

Media Do not use a solid water stream as it may scatter or spread fire.

> Specific Hazards Arising from the Substance or Mixture

- 1 Fire may produce irritating, poisonous or corrosive gases.
- 2 Containers may explode when heated.
- 3 Fire exposed containers may vent contents through pressure relief valves.
- 4 May expansion or decompose explosively when heated or involved in fire.

> Advice for Firefighters

- 1 As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear.
- 2 Fight fire from a safe distance, with adequate cover.
- 3 Prevent fire extinguishing water from contaminating surface water or the ground water system.

Section 6 Accidental Release Measure

> Personal Precautions, Protective Equipment and Emergency Procedures

- 1 Ensure adequate ventilation. Remove all sources of ignition.
- 2 Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.
- 3 Use personal protective equipment. Avoid breathing vapours, mist, gas or dust.

> Environmental Precautions

- 1 Prevent further leakage or spillage if safe to do so.
- 2 Discharge into the environment must be avoided.

> Methods and Materials for Containment and Cleaning Up

- 1 Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.
- 2 Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.
- 3 Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.



Section 7 Handling and Storage

> Precautions for Handling

- 1 Handling is performed in a good ventilated place.
- 2 Wear suitable protective equipment.
- 3 Avoid contact with skin and eyes.
- 4 Keep away from heat/sparks/open flames/ hot surfaces.
- 5 Take precautionary measures against static discharges.

> Precautions for Storage

- 1 Keep containers tightly closed.
- 2 Keep containers in a dry, cool and well-ventilated place.
- 3 Keep away from heat/sparks/open flames/ hot surfaces.
- 4 Store away from incompatible materials and foodstuff containers.

Section 8 Exposure Controls/Personal Protection

> Control Parameters

Occupational Exposure Limit Values

Component	Country/Region	Limit Value - Eight Hours		Limit Value - Short Term	
		ppm	mg/m ³	ppm	mg/m ³
Zinc chloride 7646-85-7	USA - OSHA	-	1	-	-
	South Korea	-	1	-	2
	New Zealand	-	1	-	2
	Ireland	-	1	-	2
	Denmark	-	0.5	-	1
	Australia	-	1	-	2

Biological Limit Values No information available

Monitoring Methods

- 1 EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
- 2 GBZ/T 160.1~GBZ/T 160.81-2004 Determination of toxic substances in workplace air (Series standard).



> Engineering Controls

- 1 Ensure adequate ventilation, especially in confined areas.
- 2 Ensure that eyewash stations and safety showers are close to the workstation location.
- 3 Use explosion-proof electrical/ventilating/lighting/equipment.
- 4 Set up emergency exit and necessary risk-elimination area.

> Personal Protection Equipment

Eye Protection

Tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US).

Hand Protection

Wear protective gloves (such as butyl rubber) , passing the tests according to EN 374(EU),US F739 or AS/NZS 2161.1 standard.

Respiratory protection

If exposure limits are exceeded or if irritation or other symptoms are experienced, use a full-face respirator with multi-purpose combination (US) or type AXBEK (EN 14387) respirator cartridges.

Skin and Body Protection

Wear fire/flame resistant/retardant clothing and antistatic boots.

Section 9 Physical and Chemical Properties

Appearance: White powder

Odor Threshold: No information available

Melting Point/Freezing Point (°C): 290

Flash Point (°C)(Closed Cup): Not applicable

Flammability: No information available

Vapor Pressure (MPa): Not applicable

Relative Density (Water=1): 2.9

n-Octanol/Water Partition Coefficient:

No information available

Decomposition Temperature (°C):

No information available

Particle characteristics: No information available

Odour: No information available

pH: 4

Initial Boiling Point and Boiling Range (°C): 732

Evaporation Rate: Not applicable

Upper/lower explosive limits [% (v/v)]:

Upper limit : No information available;

Lower limit: No information available

Relative Vapour Density (Air = 1): Not applicable

Solubility: Miscible with water

Auto-Ignition Temperature (°C):

No information available

Kinematic Viscosity (mm²/s):

Not applicable

Section 10 Stability and Reactivity

Reactivity

Contact with incompatible substances can cause decomposition or other chemical reactions.

Chemical Stability

Stable under proper operation and storage conditions.

Possibility of Hazardous Reactions

In contact with organic peroxides cause a fire immediately.



Conditions to Avoid	Incompatible materials, heat, flame and spark.
Incompatible Materials	Organic peroxides.
Hazardous Decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11 Toxicological Information

> Acute Toxicity

Component	CAS No.	LD50(Oral)	LD ₅₀ (Dermal)	LC ₅₀ (Inhalation, 4h)
Zinc chloride	7646-85-7	350mg/kg (Rat)	n/a	n/a

> Skin Corrosion/Irritation

Causes severe skin burns and eye damage (Category 1) (Zinc chloride)

> Serious Eye Damage/Irritation

Causes serious eye damage (Category 1) (Zinc chloride)

> Skin Sensitization

No information available

> Respiratory Sensitization

No information available

> Germ Cell Mutagenicity

No information available

> Carcinogenicity

ID	CAS No.	Component	IARC	NTP
1	7646-85-7	Zinc chloride	Not Listed	Not Listed

> Reproductive Toxicity

No information available

> Reproductive Toxicity (Additional)

No information available

> STOT-Single Exposure

No information available

> STOT-Repeated Exposure

No information available



> Aspiration Hazard

No information available

Section 12 Ecological Information

> Acute Aquatic Toxicity

Component	CAS No.	Fish	Crustaceans	Algae
Zinc chloride	7646-85-7	LC50: 3.36mg/L (96h) (Fish)	EC50: 1.97mg/L (48h)	ErC50: 0.05mg/L (96h)

> Chronic Aquatic Toxicity

No information available

> Others

Persistence and Degradability

No information available

Bioaccumulative Potential

No information available

Mobility in Soil

No information available

Results of PBT and vPvB Assessment

Zinc chloride does not meet the criteria for PBT and vPvB according to Regulation (EC) No 1907/2006, annex XIII.

Section 13 Disposal Considerations

Waste Chemicals

Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.

Contaminated Packaging

Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.

Disposal Recommendations

Refer to section 13.1 and 13.2.

Section 14 Transport Information

Transporting Label



Marine pollutant

Yes

UN Number

2331

UN Proper Shipping Name

ZINC CHLORIDE, ANHYDROUS

Transport Hazard Class

8

Transport Subsidiary Hazard Class

None

Packing Group

III



Section 15 Regulatory Information

> International Chemical Inventory

Component	EINECS	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AICS	ENCS
Zinc chloride	√	√	√	√	√	√	√	√	√

【EINECS】 European Inventory of Existing Commercial Chemical Substances.

【TSCA】 United States Toxic Substances Control Act Inventory.

【DSL】 Canadian Domestic Substances List.

【IECSC】 China Inventory of Existing Chemical Substances.

【NZIoC】 New Zealand Inventory of Chemicals.

【PICCS】 Philippines Inventory of Chemicals and Chemical Substances.

【KECI】 Existing and Evaluated Chemical Substances.

【AICS】 Australia Inventory of Chemical Substances.

【ENCS】 Existing And New Chemical Substances.

Note

"√" Indicates that the substance included in the regulations

"×" That no data or included in the regulations

Section 16 Additional Information

Creation Date 2020/08/16

Revision Date 2020/08/16

Reason for Revision -

> Disclaimer

This Safety Data Sheet (SDS) was prepared according to UN GHS (the 7th revised edition). The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.