According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 11.21.2016 Page 1 of 8

Zinc Chloride, Reagent Grade

SECTION 1: Identification

Product identifier

Product name: Zinc Chloride, Reagent Grade

Product code: S25635

Recommended use of the product and restriction on use

Relevant identified uses: Laboratory chemicals

Uses advised against: Not determined or not applicable.

Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer: Supplier: United States United States

AquaPhoenix Scientific Fisher Science Education 860 Gitts Run Road 6771 Silver Crest Road

Hanover Nazareth
PA 17331 PA 18064
(717) 632-1291 800 955-1177

Emergency telephone number:

United States

Emergency Telephone No.: 800-255-3924

SECTION 2: Hazard identification

GHS classification:

Skin corrosion, category 1B Acute toxicity (oral), category 4 Acute aquatic hazard, category 1 Chronic aquatic hazard, category 1

Label elements

Hazard pictograms:







Signal word: Danger

Hazard statements:

H314 Causes severe skin burns and eye damage.

H302 Harmful if swallowed.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements:

P260 Do not breathe dust/fume/gas/mist/vapors/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 11.21.2016 Page 2 of 8

Zinc Chloride, Reagent Grade

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P321 Specific treatment (see supplemental first aid instructions on this label).

P363 Wash contaminated clothing before reuse.

P304+P340+P310 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.

P301+P330+P331+P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

P303+P361+P353+P310 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.

Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.

P305+P351+P338+P310 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 or doctor/physician.

P391 Collect spillage.

P405 Store locked up.

P501 Dispose of contents and container as instructed in Section 13.

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 7646-85-7	Zinc Chloride	100

Additional Information: None

SECTION 4: First-aid measures

Description of first-aid measures

General notes:

Not determined or not available.

After inhalation:

Move exposed individual to fresh air

Loosen clothing as necessary and position individual in a comfortable position

Maintain an unobstructed airway

Immediately call a POISON CONTROL CENTER or seek medical attention

After skin contact:

Immediately remove all contaminated clothing

Wash affected area with soap and water

Immediately call a POISON CONTROL CENTER or seek medical attention

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes

Remove contact lens(es) if able to do so during rinsing

Immediately call a POISON CONTROL CENTER or seek medical attention

After ingestion:

Immediately call a POISON CONTROL CENTER or seek medical attention

Do not induce vomiting

Rinse mouth and then drink plenty of water

Most important symptoms and effects, both acute and delayed

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 11.21.2016 Page 3 of 8

Zinc Chloride, Reagent Grade

Acute symptoms and effects:

Not determined or not available.

Delayed symptoms and effects:

Not determined or not available.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not available.

Notes for the doctor:

Not determined or not available.

SECTION 5: Fire-fighting measures

Extinguishing media

Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing

Refer to Section 8

Special precautions:

Avoid inhaling gases, fumes, dust, mist, vapor and aerosols

Avoid contact with skin, eyes and clothing

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation

Ensure air handling systems are operational

Wear protective eye wear, gloves and clothing

Environmental precautions:

Should not be released into the environment

Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Do not eat, drink, smoke or use personal products when handling chemical substances.

Avoid breathing mist or vapor.

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 11.21.2016 Page 4 of 8

Zinc Chloride, Reagent Grade

Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
United States (OSHA)	Zinc Chloride	7646-85-7	OSHA PEL: TWA 1 mg/m ³
ACGIH	Zinc Chloride	7646-85-7	ACGIH TLV: TWA 1 mg/m ³
	Zinc Chloride	7646-85-7	ACGIH TLV: STEL 2 mg/m ³
NIOSH	Zinc Chloride	7646-85-7	NIOSH REL: TWA 1 mg/m ³

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Not determined or not applicable.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Respiratory protection:

When necessary, use NIOSH-approved breathing equipment.

General hygienic measures:

Wash hands before breaks and at the end of work.

Avoid contact with skin, eyes and clothing.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance (physical state, color):	White Solid
Odor:	Odorless
Odor threshold:	Not available
pH-value:	5 at 100 g/l at 20°C (68°F)
Melting/Freezing point:	293 °C (559 °F)
Boiling point/range:	732 °C (1,350 °F)
Flash point:	Not available
Evaporation rate:	Not available
Flammability (solid, gaseous):	Not available
Explosion limit upper:	Not available

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 11.21.2016 Page 5 of 8

Zinc Chloride, Reagent Grade

Explosion limit lower:	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Density:	Not available
Relative density:	2.907 g/cm3
Solubilities:	Not determined or not available.
Partition coefficient (n-octanol/water):	Not available
Auto/Self-ignition temperature:	Not available
Decomposition temperature:	Not available
Dynamic viscosity:	Not available
Kinematic viscosity:	Not available
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

None under normal conditions of use and storage.

Incompatible materials:

None known.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Harmful if swallowed **Product data:** No data available.

Substance data:

Name	Route	Result
Zinc Chloride	dermal	LD50 Oral - Rat - 350 mg/kg
	inhalation	LCLo Inhalation - Rat - 1960 mg/m3 10M

Skin corrosion/irritation

Assessment: Causes severe skin burns and eye damage

Product data: No data available.

Substance data:

Name	Result

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 11.21.2016 Page 6 of 8

Zinc Chloride, Reagent Grade

Name	Result
Zinc Chloride	Causes skin damage

Serious eye damage/irritation

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available. **Substance data:** No data available.

Respiratory or skin sensitization

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available. **Substance data:** No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available. **Substance data:** No data available.

Reproductive toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available. Substance data: No data available.

Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available. **Substance data:** No data available.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available.

Other information: No data available.

SECTION 12: Ecological information

Acute (short-term) toxicity

Assessment: Very toxic to aquatic life

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 11.21.2016 Page 7 of 8

Zinc Chloride, Reagent Grade

Product data: No data available.

Substance data:

Name	Result
Zinc Chloride	LC50 - Sand Flounder - 0.027 mg/L - 96 hr
	EC50 - Cyclopoid Copepod - 0.052 mg/L - 48 hr

Chronic (long-term) toxicity

Product data: No data available. **Substance data:** No data available.

Persistence and degradability

Product data: No data available. **Substance data:** No data available.

Bioaccumulative potential

Product data: No data available. **Substance data:** No data available.

Mobility in soil

Product data: No data available. **Substance data:** No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11)

SECTION 14: Transport information

Canadian Transportation of Dangerous Goods (TDG)

UN number	UN 2331
UN proper shipping name	Zinc Chloride
UN transport hazard class(es)	8
Packing group	III
Environmental hazards	Marine Pollutant
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	UN 2331	
UN proper shipping name	Zinc Chloride	
UN transport hazard class(es)	8	>
Packing group	III	

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 11.21.2016 Page 8 of 8

Zinc Chloride, Reagent Grade

Environmental hazards	Marine Pollutant
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN 2331
UN proper shipping name	Zinc Chloride
UN transport hazard class(es)	8
Packing group	III
Environmental hazards	Marine Pollutant
Special precautions for user	None

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code		
Bulk Name	None	
Ship type	None	
Pollution category	None	

SECTION 15: Regulatory information

Canada regulations

Domestic substances list (DSL):

76	46-85-7	Zinc Chloride	Listed
----	---------	---------------	--------

Non-domestic substances list (NDSL): Not determined.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 3-0-0 **HMIS:** 3-0-0

Initial preparation date: 11.21.2016

End of Safety Data Sheet