SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name	Zinc Chloride, 50%
CAS number	See Section 3
Synonyms	N/A

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

Identified uses	Laboratory chemicals.

1.3 Details of the supplier of the safety data sheet

Company	Lab Alley, LLC 12501 Pauls Valley Road Austin, Texas 78737 U.S.A.
Telephone	512-668-9918
Fax	512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute Oral Toxicity	Category 3
Acute Dermal Toxicity	Category 2
Skin Corrosion/Irritation	Category 1A
Eye Damage/Irritation	Category 1
Germ Cell Mutagenicity	Category 2
Reproductive Toxicity	Category 2

Specific Target Organ Toxicity (single exposure)	Category 1
Specific Target Organ Toxicity (repeated exposure)	Category 1
Corrosive to Metals	Category 1
Acute Aquatic Hazard	Category 1
Chronic Aquatic Hazard	Category 1

2.2 GHS Label elements, including precautionary statements

Pictogram

Signal Word: Danger

Hazard statements:
May be corrosive to metals.
Toxic if swallowed.
Fatal in contact with skin.
Causes severe skin burns and eye damage.
Causes serious eye damage.
Suspected of causing genetic defects.
Suspected of damaging fertility or the unborn child.
Causes damage to organs.
Causes damage to organs through prolonged or repeated exposure.
Very toxic to aquatic life.

Precautionary statements:

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
Keep only in original container. Do not breathe fumes, mist, vapors, or spray. Do not get in eyes, on skin, or on clothing. Wash arms, hands, and face thoroughly after handling. Do not eat, drink, or smoke when using this product. Avoid release to the environment. Wear protective gloves and eye protection.

Response: IF exposed, call a POISON CENTER or physician. IF exposed or concerned, get medical attention. Specific treatment (Wash areas of contact with water). Get medical attention if you feel unwell.

IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash with plenty of soap and water. Wash contaminated clothing before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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

Spills: Absorb spillage to prevent material damage.

Storage: Store locked up. Store in corrosive resistant container with a resistant inner liner.

Disposal: Dispose of contents in accordance with local, state, federal and international regulations.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None identified.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Zinc chloride	Zinc (II) chloride; Zinc dichloride	7646-85-7	50%
Water	Aqua; H2O	7732-18-5	50%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If inhaled Remove person to fresh air and keep comfortable for breathing.

In case of skin contact Take off immediately all contaminated clothing. Rinse skin with water. May cause irritation, redness, and pain.

In case of eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. May cause irritation, redness, pain, and tearing.

If swallowed Rinse mouth. Do NOT induce vomiting. Dilute with water or milk. Vomiting may occur spontaneously but do not induce. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Corrosive. May cause irritation to areas of contact. In case of eye contact, may cause irritation, redness, pain, and tearing. In case of skin contact, may cause irritation, redness, and pain.

4.3 Indication of any immediate medical attention and special treatment needed

Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water).

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media No information available.

5.2 Specific hazards arising from the substance or mixture

Not considered to be a fire or explosion hazard.

5.3 Special protective equipment and precautions for firefighters

Use protective clothing and NIOSH-approved breathing equipment appropriate for the surrounding fire.

5.4 Further information

Flash Point No information available.

Autoignition Temperature No information available.

Explosion limits

Upper No data available.

Lower No data available.

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
2	0	0	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective gloves and eye protection.

6.2 Environmental precautions

Do not flush to sewer.

6.3 Methods and materials for containment and cleaning up

Absorb with suitable material. Containerize for disposal with a hazardous waste disposal facility. Dispose of in accordance with local regulations.

6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions on safe handling
As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes and skin.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions
Store in corrosive resistant container with a resistant inner liner. Protect from freezing and physical damage. Keep only in original container.

Incompatibilities
Cyanides and sulfides, powdered zinc. When mixed with potassium, a weak explosion will occur on impact.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Component	Type	Value
Zinc chloride	TWA	1 mg/m³

US. ACGIH Threshold Limit Values

Component	Type	Value
Zinc chloride	STEL	2 mg/m³
	TWA	1 mg/m³

Biological occupational exposure limits
No information available.

8.2 Exposure controls

Appropriate engineering controls
No specific controls are needed. Normal room ventilation is adequate.

Personal protective equipment

Eye/face protection
Wear eye protection. Safety glasses or goggles.

Skin protection
Wear protective, chemical-resistant gloves.

Body Protection
Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory protection
Normal room ventilation is adequate.

Control of environmental exposure
No information available.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Appearance	Colorless
Odor	No information available
Odor Threshold	No information available
pH	Approximately 4
Melting Point/Range	No information available
Boiling Point/Range	No information available
Evaporation Rate	No information available
Flammability (solid)	Not applicable
Flammability or explosive limit	No data available
Upper	
Lower	
Vapor Pressure	No information available
Vapor Density	No information available
Density	1.57
Solubility	Miscible
Partition coefficient; n-octanol/water	No data available
Autoignition Temp	No information available
Decomposition Temp	No information available
Viscosity	No information available
Molecular Formula	$ZnCl_2$
Molecular Weight	136.286 g/mol
VOC Content(%)	No information available
Oxidizing properties	No information available

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity
Corrosive to metals.

10.2 Chemical stability
Stable under normal conditions of use and storage.

10.3 Possibility of hazardous reactions
When mixed with potassium, a weak explosion will occur on impact.

10.4 Conditions to avoid
Keep only in original container. Avoid incompatible materials.

10.5 Incompatible materials
Cyanides and sulfides, powdered zinc.

10.6 Hazardous decomposition products
Will not occur.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Zinc chloride	350 mg/kg (Rat)	-	-

Skin corrosion/irritation
Causes severe skin burns.

Serious eye damage/eye irritation
Causes serious eye damage.

Respiratory or skin sensitization
Not applicable.

Germ cell mutagenicity
Suspected of causing genetic defects.

Carcinogenicity

Component	CAS	IARC	NTP	ACGIH	OSHA	Mexico
Zinc chloride	7646-85-7	Not listed	Not listed	Not listed	Not listed	Not listed

Specific target organ toxicity - single exposure
Causes damage to organs.

Specific target organ toxicity - repeated exposure
Causes damage to organs through prolonged or repeated exposure.

Reproductive toxicity
Suspected of damaging fertility or the unborn child.

Chronic effects
No information available.

11.2 Additional Information
No information available.

SECTION 12: Ecological information

12.1 Toxicity
Very toxic to aquatic life. Avoid release to the environment.

12.2 Persistence and degradability
No information available.

12.3 Bio accumulative potential
No information available.

12.4 Mobility in soil
No information available.

12.5 Results of PBT and vPvB assessment
No information available.

12.6 Endocrine disrupting properties
No information available.

12.7 Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

UN-no	UN1840
Proper Shipping Name	Zinc Chloride, solution
Hazard Class	8
Packing Group	III

IMDG

UN-no	UN1840
Proper Shipping Name	Zinc Chloride, solution
Hazard Class	8
Packing Group	III

IATA

UN-no	UN1840
Proper Shipping Name	Zinc Chloride, solution
Hazard Class	8
Packing Group	III

SECTION 15: Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)

Listed, Zinc chloride (CAS #7646-85-7), RQ: 1000 lb.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

See Section 2 for more information.

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

Not listed.

US state regulations

US. Massachusetts RTK - Substance List

Listed, Zinc chloride (CAS #7646-85-7).

US. New Jersey Worker and Community Right-to-Know Act

Listed, Zinc chloride (CAS #7646-85-7).

US. Pennsylvania Worker and Community Right-to-Know Law

Listed, Zinc chloride (CAS #7646-85-7).

California Proposition 65

Not listed.

SECTION 16: Other information

Issue date: 12/12/2019
Revision 1: 11/18/2024

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.