Buy Zinc Chloride 50% Solution Online At https://www.laballey.com/products/zinc-chloride-50-solution



## **Safety Data Sheet**

Classified According to OSHA Hazard Communication Standard (HCS)

## **SECTION 1: Identification**

## 1.1. Product Identifier

Trade Name or Designation: Zinc Chloride, 50% (w/v), Technical Grade

Product Number: 8722 Other Identifying Product Numbers: ALL 8722-

## 1.2. Recommended Use and Restrictions on Use

General Laboratory Reagent

## 1.3. Details of the Supplier of the Safety Data Sheet

#### Lab Alley LLC

22111 Highway 71 West, Suite 601 Spicewood, Texas 78669 Tel: 512-668-9918



## SECTION 2: Hazard(s) Identification

## 2.1. Classification of the Substance or Mixture

For the full text of the Hazard and Precautionary Statements listed below, see Section 16.

|   |             | Hazard    |   |
|---|-------------|-----------|---|
| Hazard Class  | Category    | Statement | Precautionary Statements                                  |
| Acute Toxicity - Oral                                       | Category 3  | H301      | P264, P270, P301+P310, P321, P330, P405, P50 <sup>-</sup> |
| Acute Toxicity - Dermal                                     | Category 2  | H310      | P262, P264, P270, P280, P352, P310, P321,                 |
|   |             |           | P361, P405, P501  |
| Skin Corrosion / Irritation                                 | Category 1A | H314      | P260, P264, P280, P301+P330+P331,                         |
|   |             |           | P303+P361+P353, P363, P304+P340, P310,                    |
|   |             |           | P321, P305+P351+P338, P405, P501                          |
| Eye Damage / Irritation                                     | Category 1  | H318      | P280, P305+P351+P338, P310                                |
| Germ Cell Mutagenicity                                      | Category 2  | H341      | P201, P202, P280, P308+P313, P405, P501                   |
| Reproductive Toxicity                                       | Category 2  | H361      | P201, P202, P280, P308+P313, P405, P501                   |
| Specific Target Organs/Systemic Toxicity Following Single   | Category 1  | H370      | P260, P264, P270, P307+P311, P321, P405, P50 <sup>-</sup> |
| Exposure  |             |           |   |
| Specific Target Organs/Systemic Toxicity Following Repeated | Category 1  | H372      | P260, P264, P270, P314, P501                              |
| Exposure  |             |           |   |
| Corrosive to Metals   | Category 1  | H290      | P234, P390, P406  |
| Hazardous to the Aquatic Environment (Acute)                | Category 1  | H400      | P273, P501  |
| Hazardous to the Aquatic Environment (Chronic)              | Category 1  | H400      | P273, P501  |

## 2.2. GHS Label Elements

**Pictograms:** 



Signal Word:

Danger

Product Number: 8722



#### Hazard Statements:

| Hazard Number | Hazard Statement  |
|---------------|---|
| H290          | May be corrosive to metals.                                     |
| H301          | Toxic if swallowed.   |
| H310          | Fatal in contact with skin.                                     |
| H314          | Causes severe skin burns and eye damage.                        |
| H318          | Causes serious eye damage.                                      |
| H341          | Suspected of causing genetic defects.                           |
| H361          | Suspected of damaging fertility or the unborn child.            |
| H370          | Causes damage to organs.  |
| H372          | Causes damage to organs through prolonged or repeated exposure. |
| H400          | Very toxic to aquatic life.                                     |



#### **Precautionary Statements:**

| Precautionary Number: | Precautionary Number:   |
|-----------------------|---|
| P201                  | Obtain special instructions before use.   |
| P202                  | Do not handle until all safety precautions have been read and understood.                               |
| P234                  | Keep only in original container.  |
| P260                  | Do not breathe fumes, mist, vapors, or spray.   |
| P262                  | Do not get in eyes, on skin, or on clothing.  |
| P264                  | Wash arms, hands and face thoroughly after handling.  |
| P270                  | Do not eat, drink or smoke when using this product.   |
| P273                  | Avoid release to the environment.   |
| P280                  | Wear protective gloves and eye protection.  |
| P301+P310             | IF SWALLOWED: Immediately call a POISON CENTER or physician.  |
| 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.            |
| P304+P340             | IF INHALED: Remove person to fresh air and keep comfortable for breathing.                              |
| P305+P351+P338        | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy |
|                       | do. Continue rinsing.   |
| P307+P311             | IF exposed: Call a POISON CENTER or physician.  |
| P308+P313             | IF exposed or concerned: Get medical attention.   |
| P310                  | Immediately call a POISON CENTER or physician.  |
| P314                  | Get medical attention if you feel unwell.   |
| P321                  | Specific treatment (Wash areas of contact with water).  |
| P330                  | Rinse mouth.  |
| P352                  | Wash with plenty of soap and water.   |
| P361                  | Take off immediately all contaminated clothing and wash it before reuse.                                |
| P363                  | Wash contaminated clothing before reuse.  |
| P390                  | Absorb spillage to prevent material damage.   |
| P405                  | Store locked up.  |
| P406                  | Store in corrosive resistant container with a resistant inner liner.                                    |
| P501                  | Dispose of contents in accordance with local, state, federal and international regulations.             |

## 2.4. Hazards not Otherwise Classified or Covered by GHS

Data not available.

## **SECTION 3: Composition / Information on Ingredients**

## 3.1. Components of Substance or Mixture

| Chemical Name | Formula           | Molecular Weight | CAS Number | %   |
|---------------|-------------------|------------------|------------|-----|
| Water         | H <sub>2</sub> O  | 18.01 g/mol      | 7732-18-5  | 50% |
| Zinc Chloride | ZnCl <sub>2</sub> | 136.29 g/mol     | 7646-85-7  | 50% |



## **SECTION 4: First-Aid Measures**

## 4.1. General First Aid Information

- Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsin May cause irritation, redness, pain, and tearing.
  - Inhalation: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- Skin Contact: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. May cause irritation, redness, and pain.
  - Ingestion: IF SWALLOWED: rinse mouth. Do NOT induce vomiting. Dilute with water or milk. Vomiting may occur spontaneously but do no induce. Call a physician immediately.

## 4.2. Most Important Symptoms and Effects, Acute and Delayed

CAUTION! Corrosive. May cause irritation to areas of contact. Handle this and all chemicals with care. Wash areas of contact with water. EYE CONTACT: May cause irritation, redness, pain, and tearing. SKIN CONTACT: May cause irritation, redness, and pain.

## 4.3. Medical Attention or Special Treatment Needed

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

## **SECTION 5: Fire-Fighting Measures**

## 5.1. Extinguishing Media

Use extinguishing media appropriate for surrounding fire.

## 5.2. Specific Hazards Arising from the Substance or Mixture

Not considered to be a fire or explosion hazard.

## 5.3. Special Protective Equipment for Firefighters

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

## **SECTION 6: Accidental Release Measures**

## 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Wear protective gloves and eye protection.

#### 6.2. Cleanup and Containment Methods and Materials

Do not flush to sewer. Absorb with suitable material. Containerize for disposal with a hazardous waste disposal facility. Dispose of in accordance with local regulations.

## **SECTION 7: Handling and Storage**

## 7.1. Precautions for Safe Handling and Storage Conditions

Store in corrosive resistant container with a resistant inner liner. As with all chemicals, wash hands thoroughly after handling. Avoid contact with eyes skin. Protect from freezing and physical damage.



## **SECTION 8: Exposure Controls / Personal Protection**

## **Control Parameters**

| Chemical Name             | Limit Type | Country | Exposure Limit                  | Information Source                     |
|---------------------------|------------|---------|---------------------------------|--|
| Zinc Chloride (7646-85-7) | TWA        | USA     | 1 mg/m <sup>3</sup> TWA (fume)  | U.S OSHA - Final PELs - Time Weighted  |
|                           |            |         |                                 | Averages (TWAs)                        |
| Zinc Chloride (7646-85-7) | TLV-STEL   | USA     | 2 mg/m <sup>3</sup> STEL (fume) | ACGIH - Threshold Limit Values - Short |
|                           |            |         |                                 | Term Exposure Limits (TLV-STEL)        |
| Zinc Chloride (7646-85-7) | TLV-TWA    | USA     | 1 mg/m <sup>3</sup> TWA (fume)  | ACGIH - Threshold Limit Values - Time  |
|                           |            |         |                                 | Weighted Averages (TLV-TWA)            |

## 8.2. Exposure Controls

Engineering Controls: No specific controls are needed. Normal room ventilation is adequate.

Respiratory Protection: Normal room ventilation is adequate.

Skin Protection: Wear protective gloves and eye protection. Chemical resistant gloves.

Eye Protection: Wear protective gloves and eye protection. Safety glasses or goggles.

## 8.3. Personal Protective Equipment

Wear protective gloves and eye protection. Normal room ventilation is adequate. Chemical resistant gloves. Safety glasses or goggles.



## **SECTION 9: Physical and Chemical Properties**

## 9.1. Basic Physical and Chemical Properties

| Appearance:                    | Colorless liquid    |
|--------------------------------|---------------------|
| Physical State:                | Liquid              |
| Odor:                          | Data not available. |
| Odor Threshold:                | Data not available. |
| pH:                            | Approximately 4     |
| Melting/Freezing Point:        | Data not available. |
| Initial Boiling Point/Range:   | Data not available. |
| Flash Point:                   | Data not available. |
| Evaporation Rate:              | Data not available. |
| Flammability:                  | Data not available. |
| Flammability/Explosive Limits: | Data not available. |
| Vapor Pressure:                | Data not available. |
| Vapor Density:                 | Data not available. |
| Relative Density:              | 1.57                |
| Solubility:                    | Miscible            |
| Partition Coefficient:         | Data not available. |
| Auto-Ignition Temperature:     | Data not available. |
| Decomposition Temperature:     | Data not available. |
| Viscosity:                     | Data not available. |
| Explosive Properties:          | Data not available. |
| Oxidizing Properties:          | Data not available. |

## **SECTION 10: Stability and Reactivity**

## **10.1. Reactivity and Chemical Stability**

Stable under normal conditions of use and storage.

#### **10.2. Possibility of Hazardous Reactions**

Data not available.

## **10.3. Conditions to Avoid and Incompatible Materials**

Keep only in original container. Cyanides and sulfides, powdered zinc. When mixed with potassium, a weak explosion will occur on impact.

#### **10.4. Hazardous Decomposition Products**

Will not occur.



## **SECTION 11: Toxicological Information**

## 11.1. Information on Toxicological Effects

#### Acute Toxicity - Oral Exposure:

Toxic if swallowed. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. IF SWALLOWEE Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Rinse mouth. Store locked up. Dispc of contents in accordance with local, state, federal and international regulations.

#### Acute Toxicity - Dermal Exposure:

Fatal in contact with skin. 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. Wear protective gloves and eye protection. Wash with plenty of soap and water. Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Take off immediately all contaminated clothing and wash it before reuse. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

#### Acute Toxicity - Inhalation Exposure:

Not applicable.

#### Acute Toxicity - Other Information:

LD50, Oral, Rat: 350 mg/kg (Zinc Chloride), details of toxic effects not reported other than lethal dose value. Investigated as a tumorigen, mutager reproductive effector.

#### Skin Corrosion and Irritation:

Causes severe skin burns and eye damage. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling Wear protective gloves and eye protection. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store locked up. Dispose contents in accordance with local, state, federal and international regulations.

#### Serious Eye Damage and Irritation:

Causes serious eye damage. Wear protective gloves and eye protection. 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 physician.

#### **Respiratory Sensitization:**

Not applicable.

#### Skin Sensitization:

Not applicable.

#### Germ Cell Mutagenicity:

Suspected of causing genetic defects. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents accordance with local, state, federal and international regulations.

#### Carcinogenicity:

Not applicable.



#### **Reproductive Toxicity:**

Suspected of damaging fertility or the unborn child. Obtain special instructions before use. Do not handle until all safety precautions have been r and understood. Wear protective gloves and eye protection. IF exposed or concerned: Get medical attention. Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

#### Specific Target Organ Toxicity from Single Exposure:

Causes damage to organs. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Do not eat, drin or smoke when using this product. IF exposed: Call a POISON CENTER or physician. Specific treatment (Wash areas of contact with water). Store locked up. Dispose of contents in accordance with local, state, federal and international regulations.

#### Specific Target Organ Toxicity from Repeated Exposure:

Causes damage to organs through prolonged or repeated exposure. Do not breathe fumes, mist, vapors, or spray. Wash arms, hands and face thoroughly after handling. Do not eat, drink or smoke when using this product. Get medical attention if you feel unwell. Dispose of contents in accordance with local, state, federal and international regulations.

#### **Aspiration Hazard:**

Not applicable.

#### Additional Toxicology Information:

Data not available.

## **SECTION 12: Ecological Information**

#### 12.1. Ecotoxicity

Very toxic to aquatic life. Avoid release to the environment. Dispose of contents in accordance with local, state, federal and international regulations. Very toxic to aquatic life. Avoid release to the environment. Dispose of contents in accordance with local, state, federal and international regulations.

## 12.2. Persistence and Degradability

Data not available.

## 12.3. Bioaccumulative Potential

Data not available.

#### 12.4. Mobility in Soil

Data not available.

## 12.5. Other Adverse Ecological Effects

Data not available.

## **SECTION 13: Disposal Considerations**

## 13.1. Waste Treatment Methods

Data not available.



## **SECTION 14: Transportation Information**

## 14.1. Transportation by Land-Department of Transportation (DOT, United States of America)

| Sizes:                 | 4 L, 500 mL             |
|------------------------|-------------------------|
| UN Number:             | UN1840                  |
| Proper Shipping Name:  | Zinc Chloride, solution |
| Hazard Class:          | 8                       |
| Packing Group:         | III                     |
| Hazard Placard Labels: | COPROSIVE               |

## 14.2. Transportation by Air - International Air Transport Association (IATA)

| Sizes:                 | ALL                     |
|------------------------|-------------------------|
| UN Number:             | UN1840                  |
| Proper Shipping Name:  | Zinc Chloride, solution |
| Hazard Class:          | 8                       |
| Packing Group:         | III                     |
| Hazard Placard Labels: | CORROSIVE               |

## **SECTION 15: Regulatory Information**

## 15.1. Occupational Safety and Health Administration (OSHA) Hazards

Not listed.

## 15.2. Superfund Amendments and Reauthorization Act (SARA) 302 Extremely Hazardous Substances

Not listed.

#### 15.3. Superfund Amendments and Reauthorization Act (SARA) 311/312 Hazardous Chemicals

Zinc Chloride (CAS # 7646-85-7): 1000 lb final RQ; 454 kg final RQ

#### 15.4. Superfund Amendments and Reauthorization Act (SARA) 313 Toxic Release Inventory (TRI)

Zinc Chloride (CAS # 7646-85-7): 1.0 % de minimis concentration (listed under Chemical Category N982)

## 15.5. Massachusetts Right-to-Know Substance List

Zinc Chloride (CAS # 7646-85-7): Present (fume)



## 15.6. Pennsylvania Right-to-Know Hazardous Substances

Zinc Chloride (CAS # 7646-85-7): Environmental hazard Zinc Chloride (CAS # 7646-85-7): Environmental hazard (including fume) Zinc Chloride (CAS # 7646-85-7): Present Zinc Chloride (CAS # 7646-85-7): Present (including fume) Water (CAS # 7732-18-5): Present

## 15.7. New Jersey Worker and Community Right-to-Know Components

Zinc Chloride (CAS # 7646-85-7): corrosive Zinc Chloride (CAS # 7646-85-7): sn 2030 Zinc Chloride (CAS # 7646-85-7): sn 3012 Zinc Chloride (CAS # 7646-85-7): SN 3012 500 lb TPQ (Category Code N982. Includes any unique chemical substance that contains the named metal as part of that chemical structure)

## 15.8. California Proposition 65

Not listed.

## 15.9. Canada Domestic Substances List / Non-Domestic Substances List (DSL/NDSL)

Zinc Chloride (CAS # 7646-85-7): Present (DSL) Water (CAS # 7732-18-5): Present (DSL)

## 15.10. United States of America Toxic Substances Control Act (TSCA) List

Zinc Chloride (CAS # 7646-85-7): Present Water (CAS # 7732-18-5): Present

## 15.11. European Inventory of Existing Commercial Chemical Substances (EINECS), European List

## of Notified Chemical Substances (ELINCS), and No Longer Polymers (NLP)

Not listed.



## **SECTION 16: Other Information**

## 16.1. Full Text of Hazard Statements and Precautionary 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.

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.

IF SWALLOWED: Immediately call a POISON CENTER or physician. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. 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. IF exposed: Call a POISON CENTER or physician. Get medical attention if you feel unwell. Specific treatment (Wash areas of contact with water). Wash with plenty of soap and water. Wash contaminated clothing before reuse. Absorb spillage to prevent material damage.

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

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

## 16.2. Miscellaneous Hazard Classes

Canadian Carcinogenicity Hazard Class: Not Applicable. Physical Hazards Not Otherwise Classified (PHNOC): Not Applicable. Health Hazards Not Otherwise Classified (HHNOC): Not Applicable. Biohazardous Infectious Materials Hazard Class: Not Applicable. 16.3. National Fire Protection Association (NFPA) Rating

> Health: 2 Flammability: 0 Reactivity: 0 Special Hazard:



## 16.4. Document Revision

Last Revision Date: 12/12/19



## DISCLAIMER

When handled properly by qualified personnel, the product described herein does not present a significant health or safety hazard. Alteration of its characteristics by concentration, evaporation, addition of other substances, or other means may present hazards not specifically addressed herein and which must be evaluated by the user. The information furnished herein is believed to be accurate and represents the best data currently available to us. No warranty, expressed or implied, is made and LAB ALLEY LLC. assumes no legal responsibility or liability whatsoever resulting from its use.