

MATERIAL SAFETY DATA SHEET

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Zinc Chloride USP Process Material

1. PRODUCT AND COMPANY IDENTIFICATION

Magnesium Products, Inc.
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24 hr Emergency Contact number: 918 633 0593

CHEMICAL NAME: Zinc Chloride USP Process Material

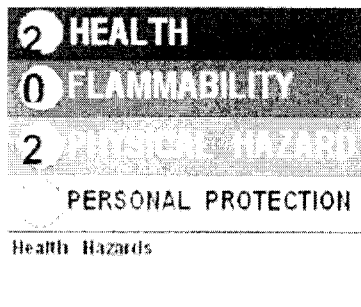
CHEMICAL FORMULA: ZnCl₂

PLANT FACILITY LOCATION: Tulsa, Oklahoma

2. COMPOSITION, INFORMATION AND INGREDIENTS

<u>Ingredient</u>	<u>%</u>	<u>CAS #</u>
Zinc Chloride	60.0 – 64.0	7646-85-7
Water	36.0 – 40.0	7732-18-5

3. HAZARD IDENTIFICATION



DANGER! CORROSIVE. CAUSES BURNS ON AREAS OF CONTACT

Inhalation: Inhalation of vapors may cause mild irritation to mucous membranes.

Skin Contact: Contact, one time or repeated or prolonged exposure can cause moderate to severe irritation, dermatitis or chemical burns.

Eye Contact: May cause severe cornea injury and result in permanent impairment of vision; blindness

Ingestion: May cause burns of mouth and throat

aic

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4. FIRST AID MEASURES

Inhalation: Remove from exposure area to fresh air. If symptoms present, seek medical attention.

Skin Contact: Remove contaminated clothing and shoes immediately. Wash affected area with large amounts of water until no evidence of chemical remains (at least 15-20 minutes). Get medical attention if symptoms present after washing.

Eye Contact: Wash eyes immediately with large amounts of water occasionally lifting upper and lower lids until no evidence of chemical remains (approximately 15-20 minutes). Get medical attention immediately.

Ingestion: If swallowed, do not induce vomiting. Give large amounts of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

5. FIRE FIGHTING MEASURES

NFPA RATINGS: Health = 3 Flammability = 0 Reactivity = 0

Fire and Explosion: Not considered to be a fire hazard; not considered to be an explosion hazard.

Suitable Extinguishing media: Water or other appropriate agent for fighting surrounding fire.

Extinguishing media must not be used for safety reasons: Move container from fire area if it can be done without risk.

Special exposure hazard: Avoid contact with eyes.

Special protective equipment for firefighters: In the event of a fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus with full faceplate operated in the pressure demand or other positive pressure mode.

6. ACCIDENTAL RELEASE

Spill or Leak Procedures:

We recommend that the purchaser establish a spill prevention, control and counter-measure plan. This plan should include procedures for proper storage as well as clean-up of spill and leaks. The procedures should conform to safe practices and provide for proper recovery or disposal. Depending on the quantity spilled, notification of the National Response Center (800/424-8802) may be required in the case of hazardous substances. (See EPA, DOT and various state and local regulations.)

7. HANDLING AND STORAGE

Do not store in a steel container. Plastic or plastic-lined containers or storage tanks should be used.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Exposure Limits:

OSHA 8 hour Time Weighted Average (TWA) for ZnCl₂ fumes is 1 mg/m³

ACGIH TLV-TWA for ZnCl₂ fumes is 1mg/m³.

Ventilation: provide local exhaust ventilation system.

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Eye Protection: employee must wear safety glasses with splash shields or safety goggles to prevent contact with this substance.

Emergency Wash Facilities: where there is any possibility that an employee's eyes and/or skin may be exposed to this substance, the employer should provide an eye wash fountain and quick drench shower within the immediate work area for emergency use.

Clothing: Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.

Gloves: Employee must wear appropriate protective gloves to prevent contact with this substance.

9. PHYSICAL AND CHEMICAL PROPERTIES

Description: Clear To Light Yellow Solution
Physical State: Liquid
Formula: $ZnCl_2$
Boiling Point: 250 - 258 Degrees F
Specific Gravity: 1.7 - 1.8
Water Solubility: Completely Miscible In Water
Odor: None
Flashpoint: None

10. STABILITY AND REACTIVITY

Stability: Stable

Incompatibility: Cyanides - may release toxic HCN (Hydrogen Chloride)
Sulfides - may release toxic H_2S (Hydrogen Sulfide)

Decomposition: At high temperatures, toxic fumes of chlorine and zinc oxide may occur

Hazardous Polymerization: Will not occur

11. TOXICOLOGICAL INFORMATION

Oral LD50 for rats is 350mg/kg for 100% Zinc Chloride

		NTP Carcinogen		IARC Category
		Known	Anticipated	
Zinc Chloride	7646-85-7	No	No	None
Water	7732-18-5	No	No	None

12. ECOLOGICAL INFORMATION

Environmental Fate:
No information found

Environmental Toxicity:
Toxic to aquatic organisms

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13. DISPOSAL CONSIDERATIONS

Waste Disposal Method*:

Used or unused product should be tested to determine hazard status and disposal requirements under federal, state and local laws and regulations.

*Disposer must comply with federal, state and local disposal and discharge laws.

14. TRANSPORT INFORMATION

DOT Shipping name - Zinc chloride solution, 8, UN1840, PGIII

Label: Corrosive

15. REGULATORY INFORMATION

Chemical Inventory Status Part 1:

<u>Ingredient</u>		<u>TSCA</u>	<u>EC</u>	<u>Japan</u>	<u>Australia</u>
Zinc Chloride	7646-85-7	Yes	Yes	Yes	Yes

Chemical Inventory Status Part 2:

<u>Ingredient</u>		<u>Korea</u>	<u>DSL</u>	<u>Canada</u> <u>NDSL</u>	<u>Phil.</u>
Zinc Chloride	7646-85-7	Yes	Yes	No	Yes

Federal/State/International Regulations Part 1:

<u>Ingredient</u>		<u>SARA 302</u> <u>RQ</u>	<u>TPQ</u>	<u>SARA 313</u> <u>LIST</u>	<u>CHEMICAL CATG.</u>
Zinc Chloride	7646-85-7	No	No	No	No

Federal, State & International Regulations Part 2:

<u>Ingredient</u>		<u>CERCLA</u>	<u>261.33</u>	<u>RCRA</u> <u>TSCA 8(d)</u>
Zinc Chloride	7646-85-7	1000	No	No

SARA 311/312 Acute: Yes; Chronic: Yes

16. OTHER INFORMATION

Magnesium Products, Inc. provides this information in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained individual using this product. Individuals receiving this information must exercise their independent judgment in determining the appropriateness for a particular purpose. Magnesium Products, Inc. makes no representations or warranties, either expressed or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information provided or the product to which this information refers. Accordingly, Magnesium Products, Inc. will not be responsible for damages resulting from use of or reliance upon this information.

REVISION HISTORY

DATE	REV #	REASON	INITIALS
9/2007	01	Before required revision history to MSDS	MRM / CP
9/24/09	02	UPDATED TO ANSI STANDARD FORMAT	MRM / CP