



Madison Industries, Inc.

SAFETY DATA SHEET

Issue Date 1-Jul-2015

Revision Date 1-Jul-2015

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Identifier

Product Name Zinc Chloride Solution

Other Means of Identification

SDS # OBC-002

UN/ID No UN1840

Recommended Use of the Chemical and Restrictions on Use

Recommended Use For industrial use.

Details of the Supplier of the Safety Data Sheet

Manufacturer Address

Madison Industries, Inc.
554 Waterworks Rd.
Old Bridge, NJ 08857

Distributed by:
SAL Chemical
3036 Birch Drive,
Weirton, WV 26062
304.748.8200 - Phone
304.797.8751 - Fax

Emergency Telephone Number

Company Phone Number (732) 727-2225 (normal business hours)
(800) 275-3924 (24 hour number)

Emergency Telephone Chemtrec 1-800-424-9300 (North America) 1-703-527-3887 (International)

2. HAZARDS IDENTIFICATION

Classification

Acute toxicity - Oral	Category 4
Skin Corrosion/Irritation	Category 1 Sub-category C
Specific target organ toxicity (single exposure)	Category 3

Signal Word

DANGER

Hazard Statements

Harmful if swallowed
Causes severe skin burns and eye damage
May cause respiratory irritation. May cause drowsiness or dizziness



Appearance Clear, colorless liquid

Physical State Liquid

Odor No odor

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Do not breathe dust/fume/gas/mist/vapors/spray
 Wear protective gloves/protective clothing/eye protection/face protection
 Use only outdoors or in a well-ventilated area

Precautionary Statements - Response

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
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse
 Immediately call a POISON CENTER or doctor/physician
 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
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 Rinse mouth
 Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Zinc chloride	7646-85-7	50 - 62.5

4. FIRST AID MEASURES

First Aid Measures

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately.
Skin Contact	Remove contaminated clothing and shoes. Immediately flush thoroughly with water for at least 15 minutes. Immediately call a POISON CENTER or doctor/physician.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician or poison control center immediately.
Ingestion	Never give anything by mouth to an unconscious person. Drink plenty of water or milk immediately. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

Most Important Symptoms and Effects, both Acute and Delayed

Symptoms	May cause severe burns to skin, eyes and other body tissue. Harmful if swallowed. Inhalation may cause drowsiness or dizziness. May cause pulmonary edema. May cause metal fume fever. See Section 11: Toxicological Information of this SDS for more detailed symptoms.
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Indication of any Immediate Medical Attention and Special Treatment Needed

Note to Physicians	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Causes severe skin burns and eye damage. Causes respiratory irritation. May cause drowsiness or dizziness.

Hazardous Combustion Products May release Zinc Chloride and Zinc Oxide fumes and Hydrogen Chloride gas.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personal Precautions Wear protective clothing as described in Section 8 of this safety data sheet.

Methods and Material for Containment and Cleaning Up

Methods for Containment Contain spills to prevent migration and entry into any waterway.

Methods for Cleaning Up Neutralize small spills with sodium bicarbonate, then flush area with a large excess of water to a chemical sewer. Prevent run off to storm sewers and ditches leading to natural waterways. Sweep up and shovel into suitable containers for disposal. Suitable containers include plastic, plastic lined, or rubber lined. Do NOT store in steel containers.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Advice on Safe Handling Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust/fume/gas/mist/vapors/spray. Wear protective gloves/protective clothing and eye/face protection. Use only outdoors or in a well-ventilated area. Use personal protection recommended in Section 8.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions Store locked up. Suitable containers include plastic, plastic lined, or rubber lined. Do NOT store in steel containers.

Incompatible Materials Cyanides - may release toxic HCN
Sulfides - may release toxic Hydrogen Sulfide.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Zinc chloride 7646-85-7	STEL: 2 mg/m ³ fume TWA: 1 mg/m ³ fume	TWA: 1 mg/m ³ fume (vacated) TWA: 1 mg/m ³ fume (vacated) STEL: 2 mg/m ³ fume	IDLH: 50 mg/m ³ fume TWA: 1 mg/m ³ fume STEL: 2 mg/m ³ fume

Appropriate Engineering Controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits. Showers
Eyewash stations
Ventilation systems.

Individual Protection Measures, such as Personal Protective Equipment

Eye/Face Protection OSHA approved chemical safety goggles with full face shield.

Skin and Body Protection Suitable protective clothing. Rubber boots. Rubber apron. Rubber gloves.

Respiratory Protection Ensure adequate ventilation, especially in confined areas. If engineering controls do not maintain airborne concentrations below recommended exposure limits, a NIOSH/MSHA approved respirator must be worn.

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

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on Basic Physical and Chemical Properties**

Physical State	Liquid	Odor	No odor
Appearance	Clear, colorless liquid	Odor Threshold	Not determined
Color	Colorless		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	< 1.0	
Melting Point/Freezing Point	-34 °C / -30 °F	
Boiling Point/Boiling Range	127 °C / 266 °F	
Flash Point Evaporation	Not Flammable	
Rate Flammability (Solid, Gas)	<1	(butyl acetate = 1)
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	~3 mmHg	
Vapor Density	Vapor is Water	
Specific Gravity	1.6 to 1.8	
Water Solubility	Completely soluble	
Solubility in Other Solvents	Not determined	
Partition Coefficient	Not determined	
Autoignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY**Reactivity**

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

Cyanides - may release toxic HCN

Sulfides - may release toxic Hydrogen Sulfide.

Hazardous Decomposition Products

None under normal use conditions. Decomposition can occur at high temperatures.

11. TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure**Product Information**

Eye Contact	Causes severe eye damage.
Skin Contact	Causes severe skin burns.
Inhalation	May cause respiratory irritation. May cause drowsiness or dizziness.
Ingestion	Harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Zinc chloride 7646-85-7	= 350 mg/kg (Rat)	-	-
Water 7732-18-5	> 90 mL/kg (Rat)	-	-

Information on Physical, Chemical and Toxicological Effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and Immediate Effects as well as Chronic Effects from Short and Long-term Exposure

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical Measures of Toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Persistence and Degradability

Not determined

Bioaccumulation

Not determined

Mobility

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods**

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations. With prior approval the material can be returned to the manufacturer.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

Chemical Name	California Hazardous Waste Status
Zinc chloride 7646-85-7	Toxic Corrosive

14. TRANSPORT INFORMATION**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No	UN1840
Proper Shipping Name	Zinc Chloride Solution
Hazard Class	8
Packing Group	III
Reportable Quantity (RQ)	1000

IATA

UN/ID No	UN1840
Proper Shipping Name	Zinc Chloride Solution
Hazard Class	8
Packing Group	III

IMDG

UN/ID No	UN1840
Proper Shipping Name	Zinc Chloride Solution
Hazard Class	8
Packing Group	III

15. REGULATORY INFORMATION**International Inventories**

Not Determined

Legend:

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
- ENCS - Japan Existing and New Chemical Substances*
- IECSC - China Inventory of Existing Chemical Substances*
- KECL - Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*

US Federal Regulations**CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Zinc chloride 7646-85-7	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

SARA 311/312 Hazard Categories

Acute health hazard Yes

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Zinc chloride - 7646-85-7	7646-85-7	50 - 62.5	1.0

CWA (Clean Water Act)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc chloride 7646-85-7 (50 - 62.5)	1000 lb	X		X

US State Regulations**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Zinc chloride 7646-85-7	X	X	X

16. OTHER INFORMATION

<u>NEPA</u>	Health Hazards	Flammability	Instability	Special Hazards Not determined
	2	0	0	Personal Protection Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical Hazards	
	2	0	0	

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Disclaimer

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet