

SAFETY DATA SHEET K-T Industries, Inc.

DATE REVISED: August 3, 2017

SECTION 1 -- IDENTIFICATION

Product Name/Part number: 1-2810

Recommended use: Soft Soldering Flux Manufacturer: K-T Industries, Inc. 3112 NW Blvd. Sheldon, IA 51201

Emergency Contact: K-T Industries **Emergency Phone:** 712-342-5361 **For other info:** (712) 324-5361

SECTION 2 - HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

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

Acute toxicity, Oral (Category 4)	H302
Skin corrosion (Category 1B)	H314
Serious eye damage (Category 1)	H318
Acute aquatic toxicity (Category 1)	H400
Chronic aquatic toxicity (Category 1)	H410

See below for full text of H-Statement

GHS Label Elements, including precautionary statements **Pictogram(s)**:



Signal Word:	Danger
Hazar	d Statement(s)
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
**H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
**Not on label	due to H410 being more severe
Precau	itionary statement(s)
P260	Do not breath dust or mist
P264	Wash skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P273	Avoid release to the environment
P280	Wear protective gloves/protective clothing/eye protection/face protection
P301+P312+P	330 IF SWALLOWED: Call a POISON CENTER if you feel unwell. Rinse mouth
P301+P330+P	331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303+P361+P	353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.
	Rinse skin with water.
	(Precautionary phrases, continued)

P304+P340+P310 IF INHALED: Remove person to fresh air and keep comfortable for	•	
breathing. Immediately call a doctor		
P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes	s.	
Remove contact lenses, if present and easy to do. Continue rinsing.		
Immediately call POISON CENTER/doctor		
P363 Wash contaminated clothing before reuse.		
P391 Collect spillage		
P405 Store locked up		
P501 Dispose of contents and/or container to an approved waste disposal plant		
Hazards not otherwise classified or not covered by GHS: None		

SECTION 3 – COMPOSITION INFORMATION			
Components	CAS Number	%	
Zinc Chloride	7646-85-7	15-25	

Unlisted percentages are non-hazardous stabilizers, and water.

SECTION 4 – FIRST AID MEASURES

Description of first aid measures

200011	
General advi	ce: Consult a physician. Show this safety data sheet to the doctor in
	attendance. Move out of dangerous area.
Inhalation:	If breathed in, move to fresh air. If not breathing, give artificial respiration.
	Consult a physician.
Eyes:	Rinse thoroughly with plenty of water for at least 15 minutes and consult a
	physician. Continue rinsing eyes during transport to hospital.
Skin:	Take off contaminated clothing and shoes immediately. Wash off with soap and
	plenty of water. Consult a physician.
Ingestion:	Do NOT induce vomiting. Never give anything by mouth to an unconscious
	person. Rinse mouth with water. Consult a physician.

Most Important Symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in section 2 (labeling) Medical Conditions Generally Aggravated by Exposure: Any weakness of the lungs, kidneys or liver will be aggravated.

SECTION 5 – FIREFIGHTING MEASURES

Suitable Extinguishing Media: Use dry chemical, CO₂ foam **Special Hazards:** No data available **Special protective actions for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

- **Personal Precautions and Equipment and emergency procedures:** Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. *See section 8 for personal protection.*
- **Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
- In Case Material is spilled: Contain spillage, then collect by wet-brushing and place in container for disposal according to local regulations.

SECTION 7 - HANDLING AND STORAGE

- **Precautions for safe handling:** Avoid inhalation of vapor or mist. Keep tightly closed in a dry and well-ventilated place.
- **General Precautions:** Do not eat, drink, or smoke while using this product. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

For full precaution statements see Section 2

Storage Requirements: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION CONTROL PARAMETERS

OSHA Permissible Exposure Limit (PEL): 1 mg/m3 **ACGIH Threshold Limit Value (TLV):** 1 mg/m3

- **Engineering Controls:** Use local exhaust ventilation to maintain air concentrations of vapors and fumes below occupational exposure standards.
- Special Engineering Control Needs: No data available
- **Respiratory Protection:** Where risk assessment shows air-purifying respirators are appropriate, use a respirator with multi-purpose combination (USA) or ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face respirator. Use respirators and components tested an approved under appropriate government standards such as NIOSH (USA) or CEN (EU).
- **Protective Gloves:** Handle with gloves. (Nitrile Rubber recommended) Gloves must be inspected prior to use. Use proper glove removal techniques (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good lab practices. Wash and dry hands after handling.
- **Eye Protection:** Use tightly fitting safety goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (USA) or EN 166 (EU)
- **Body Protection:** Complete suit protecting against chemical, flame retardant protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

SECTION 9 - PHYSICAL AND CHEMICAL CHARACTERISTICS

Appearance	Yellow paste
Odor	None
Odor threshold	No data available
рН	Not applicable
Melting point/Freezing point	No data available
Initial boiling point and boiling range	337°C / 639 ₀ F (literary)
Flash point	No data available
Evaporation rate	Not applicable
Flammability (Solid, gas)	No data available
Upper flammability or explosive limits	Upper explosion limit: No data available
Lower flammability or explosive limits	Lower explosion limit: No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility(ies)	Insoluble
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

SECTION 10 - STABILITY AND REACTIVITY

Reactivity: No data available

Stability: Product is stable under recommended storage conditions **Possibility of hazardous reactions:** No data available

Conditions to Avoid: Excessive heat or cold

Incompatibility: Alkaline, strong oxidizing or reducing materials, cyanides or combustible materials.

Hazardous Decomposition Products Hydrogen chloride gas, zinc chloride, zinc oxide, ammonium (Under fire conditions)

In the event of fire: See Section 5

SECTION 11 - TOXICOLOGICAL INFORMATION

Likely Route(s) of Exposure: Inhalation, ingestion, skin and eye contact **Symptoms (Immediate and Chronic) from**

Acute Exposure No data available

Prolonged or Repeated Exposure No data available

Measure(s) of toxicity

No data available

- **IARC:** No component of this product is present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- **NTP:** No component of this product is present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- **OSHA:** No component of this product is present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA

SECTION 12 - ECOLOGICAL INFORMATION

Toxicity

No data available
Persistence and degradability
No data available
Bio accumulative potential
Mobility in soil
No data available

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

SECTION 13 - DISPOSAL CONSIDERATIONS

Waste treatment methods

Product Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.Contaminated packaging Dispose of as unused product.

SECTION 14- TRANSPORTATION

D.O.T. (USA) – Ships as non-hazardous goods Proper Shipping Name: N/A Identification Number: N/A Packing Group: N/A Special Precautions to Note: N/A N/A Hazard Class(es): N/A Reportable Quantity (RQ): N/A Environmental Hazards Marine Pollutant? N/A

SECTION 15 - REGULATORY INFORMATION

SARA 302 Components	No Chemicals in this material are subject to the reporting	
	requirement of SARA Title I	II, Section 302.
SARA 313 Components	The following components are subject to reporting levels	
	established by SARA Title III, Section 313	
	CAS No.	Revision Date:
Zinc chloride	7646-85-7	03/01/2007
SARA 311/312 Hazards	Acute Health Hazard	

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

THIS PRODUCT IS ROHS 2 COMPLIANT

SECTION 16 - OTHER INFORMATION

HMIS Rating	
Health	2
Flammability	1
Reactivity	1

Further information:

Judgments as to the suitability of information herein or the purchaser's purposes are necessarily the purchaser's responsibility. The above information does not represent any guarantee of the properties of the product. It is believed to be correct, but does not purport to be all inclusive and should be used only as a guide. Reasonable care has been taken in the preparation of this material, and is based on the present state of our knowledge.

K-T Industries, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. There are *NO WARRANTIES, NO REPRESENTATIONS AND NO RESPONSIBILITY AS TO THE ACCURACY OR THE SUITABILITY OF THIS INFORMATION FOR ANY PURCHASER'S USE OR FOR ANY CONSEQUENCE TO USE.*

Reference(s): Sigma-Aldrich – SDS for Zinc Chloride \geq 98%

Preparation information K-T Industries, Inc. 712-324-5361

Version 3.1 Revision Date: 08/03/2017