

Section 1 - Identification

Product Name: **Soldering Crystals™** An Inorganic Soldering Flux Revised: 10/20/16

Damon Industries, Inc. 12435 Rockhill Ave NE Alliance, Ohio 44601 U.S.A.	1-800-362-9850 1-330-821-5310 1-330-821-6355 Fax info@DamonQ.com	24 HOUR EMERGENCY RESPONSE 1-800-535-5053 (U.S. & Canada) 001-352-323-3500 (International)
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Section 2 - Hazards Identification

Hazard categories: Acute Toxicity-Oral 4; Skin Corrosion/Irritation 1; Eye Corrosion/Irritation 1; Specific Target Organ Toxicity-Single Exposure 3; Specific Target Organ Toxicity-Repeated Exposure 2.

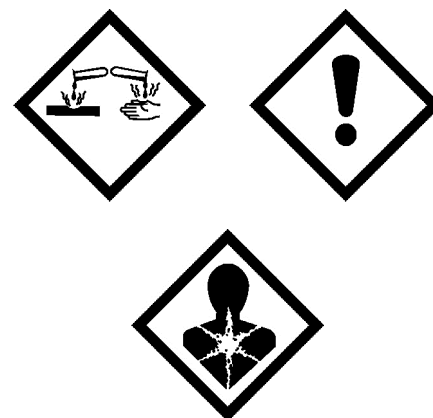
Hazard statements: May cause damage to organs through prolonged or repeated exposure.
Harmful if swallowed.
Causes severe skin burns.
Causes serious eye damage.
May cause respiratory irritation

Signal word: Danger
Pictograms: Corrosion, Health Hazard, Exclamation

Precautionary statements

Prevention

Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Do not breathe dusts or mists.
Wear protective gloves such as latex
Wear protective clothing such as an apron.
Wear eye protection such as safety glasses with side shields
Use only outdoors or in a well-ventilated area.



Response

IF SWALLOWED: Do NOT induce vomiting. Call a POISON CENTER if you feel unwell. Rinse mouth.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER for medical advice.
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.

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

Disposal: Dispose of contents in accordance with local, regional, national and international regulations.

Section 3 - Composition / Information on Ingredients

Ingredient	C.A.S. No.	Concentration
Zinc chloride	7646-85-7	75%
Ammonium Chloride	12125-02-9	19%

The remaining ingredients are not reportable as described in Appendix D to Sec. 1910.1200 Table D.1.

Section 4 - First Aid Measures

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing, lifting upper and lower eyelids occasionally. Immediately call a POISON CENTER.

Skin Contact: With brief contact, wash the exposed area with soap and water. If redness or irritation are present, flush the exposed skin with running water for up to 15 minutes. Remove contaminated clothing and shoes as soon as practical. If redness, irritation or other symptoms exist after flushing, get medical attention. Wash clothing and shoes before reuse.

Inhalation: Move the affected person to fresh air. If irritation, coughing or other symptoms persist, get medical attention immediately.

Ingestion: If the product is swallowed, give two glasses of water to drink. Never give anything by mouth to an unconscious person. Treat for shock by keeping the person warm and quiet. Get medical attention immediately.

Section 5 - Fire-Fighting Measures

Extinguishing Media: Any

Special Fire Fighting Procedures: None.

Unusual Fire and Explosion Hazards: May release hydrogen chloride, ammonia, zinc oxide, in a fire.

Section 6 - Accidental Release Measures

Steps To Be Taken If Material Is Released Or Spilled: Scoop or shovel up dry spills into a clean container for use or disposal. If the product is not contaminated it may still be used. Clean up small spills with a rag or mop. Larger liquid spills should be diked to prevent entry into sewers. Collect into clean containers for disposal. Wash the residue to sewer with plenty of water. In some localities even small amounts of zinc are prohibited from entering sewers. Comply with all local, state and federal regulations.

Section 7 - Handling and Storage

Empty containers retain product residue and may be hazardous. Observe all precautions given in this data sheet and on label. Keep container closed.

If this product contacts bleach or a cleaner containing bleach, it could produce a dangerous gas (chlorine). Your emergency preparedness plan should include this possibility.

Section 8 - Exposure Controls / Personal Protection

Ingredient	C.A.S. No.	Concentration	TWA(source)	STEL	Ceiling
Zinc chloride	7646-85-7	75%	1 mg/m ³ (1,2,3,4)	2 mg/m ³ (2,3,4)	-
Ammonium Chloride	12125-02-9	19%	10 mg/m ³ (2,3,4)	20 mg/m ³ (2,3,4)	-

(1)=OSHA (2)=NIOSH (3)=ACGIH (4)=CANADA TWA=8 hr Time Weighted Average STEL=15 minute TWA Ceiling=Instantaneous
Ingredients not shown either have no known limits or are below reportable levels in section 3 above.

Ventilation: If fumes will cause the PEL to be exceeded, use mechanical exhaust to maintain airborne concentrations below the exposure limits. It is highly recommended that an electrostatic precipitator and/or local exhaust be used to remove soldering fumes.

Respiratory Protection: If the exposure limit will be exceeded or fumes are irritating during use, wear a NIOSH respirator approved for zinc chloride fumes.

Protective Gloves: Use neoprene or latex gloves. Do not use disposable latex gloves. Disposable Nitrile gloves are good.

Eye Protection: Wear safety glasses with side shields or chemical goggles.

Other Protective Equipment: If splashing is likely to occur wear aprons, protective clothing or boots as the situation calls for. An eyewash meeting ANSI standards should be located within 10 seconds travel time of mixing and use areas.

Section 9 - Physical and Chemical Properties

Appearance and Odor: A pink powder with a slight acid odor.	
Odor Threshold: Not Available	Vapor Pressure: Not Applicable
pH of 15% solution: 4.0 ± 0.5	Vapor Density: Not Available
Melting Point: Not Available	Relative Density (Specific Gravity): 1.2
Freezing Point: Not Available	Solubility(ies): Water: 100%
Boiling Point, Initial: 330° F.	Partition coefficient: Not Applicable
Boiling Range: Not Available	Auto-ignition Temperature: Not Applicable
Flash Point: None. (ASTM D-56 closed cup)	Decomposition Temperature: Not Available
Evaporation Rate: Not Applicable (Water = 1)	Viscosity: Same as water.-
Flammability: (solid, gas): No	Volatiles Percent: <1%
Upper Explosive Limit: None	V.O.C.: 0.8% - 0.96grams/liter
Lower Explosive Limit: None	

Section 10 - Stability and Reactivity

Incompatibility: Strong alkalis, bleach, oxidizers.

Hazardous Decomposition Products: None

Section 11 - Toxicological Information

Primary Routes of Entry: Skin contact; Skin absorption; Inhalation; Ingestion

Potential Health Effects:

Eyes - causes severe irritation and may cause damage.

Skin - may cause irritation, redness, dermatitis. Repeated contact may lead to sensitization.

Swallowing - causes severe irritation and may cause damage to mucous membranes.

Breathing - fumes from soldering may cause mild to moderate irritation. Repeated exposure may lead to sensitization.

Target Organs: Skin sensitizer.

Section 12 - Ecological Information

Do not dispose of in the environment.

Section 13 - Disposal Considerations

Waste Disposal Method: Small amounts of powder or liquid may be disposed of in a sanitary sewer if local regulations do not prohibit zinc. Larger amounts should be disposed of by a licensed hazardous waste hauler complying with all federal, state and local regulations.

Section 14 - Transport Information

D.O.T. Hazard Class: North America: Not considered hazardous by D.O.T. for ground transportation.

Outside N.A. and all Air and Marine: UN 2331, Zinc Chloride Anhydrous, 8, P.G. III, Marine Pollutant

I.M.D.G. Marine Pollutant: Zinc chloride was added to the marine pollutant list on 1/8/15. Containers larger than 5 kilograms (11 pounds) must be labeled "Marine Pollutant". All cargo transport units must be labeled.

Section 15 - Regulatory Information

The components of this product are on the TSCA inventory of chemical substances.

Section 313 Supplier Notification: This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and CFR 372.

<u>Chemical Name</u>	<u>C.A.S. No.</u>	<u>% By Weight</u>
Zinc Chloride	7646-85-71	75%

Section 16 - Other Information

NFPA: H:2 F:0 I:0 **HMIS® III:** H:2 F:0 P:1 These ratings estimates are to be used only with a fully implemented training program in the workplace. NFPA® is a mark registered by the NFPA. HMIS® is a mark registered by the NPCA.

Replaces sheet dated 4/28/15. Marine pollutant information added.

The information accumulated herein is believed to be accurate but is not warranted to be. Recipients are advised to confirm in advance that the information is current, applicable, and suitable to their circumstances.