SAFETY DATA SHEET
K-T Industries, Inc.

DATE REVISED: January 1, 2024

SECTION 1 -- IDENTIFICATION

Product Name/Part number: 1-2812, 1-2816 Rubyfluid Flux
Recommended use: Soft soldering flux

Manufacturer: K-T Industries, Inc.
3112 NW Blvd.
Sheldon, IA 51201

Mfg. Phone No. (712) 324-5361
Emergency Phone No.
712-324-5361 (K-T Industries)

SECTION 2 – HAZARD(S) IDENTIFICATION

Classification of the substance or mixture

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

Corrosive to meals (Category 1)	H290
Acute toxicity, Oral (Category 4)	H302
Skin corrosion (Category 1B)	H314
Serious eye damage (Category 1)	H318
Specific target organ toxicity – Single exposure, respiratory system (Category 2)	H335
Acute aquatic toxicity (Category 1)	H400
Chronic aquatic toxicity (Category 1)	H410

See below for full text description of H-Statement(s)

GHS Label Elements, including precautionary statements

Pictogram(s):

Signal Word: Danger

Hazard Statement(s)

H290	May be corrosive to metals
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
**H318	Causes serious eye damage
H335	May cause respiratory irritation
**H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

***May be omitted from label due to presence of stricter/more severe statement.*

Precautionary statement(s)

P260	Do not breathe mist or fumes
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
P301+P312+P330	IF SWALLOWED: Call a POISON CENTER if you feel unwell. Rinse mouth
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+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. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor
P314	Get medical advice or attention if you feel unwell.
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	1-20
Hydrochloric acid	7647-01-0	1-15

SECTION 4 – FIRST AID MEASURES

Description of first aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Inhalation: Remove to fresh air.

Eyes: Flush with water for fifteen (15) Minutes. Remove contacts if present and easy to do so. Call physician.

Skin: Wash thoroughly with soap and water.

Ingestion: Rinse mouth with water. Never give anything by mouth to an unconscious person. Consult a physician immediately

Most Important Symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in section 2 (labeling)

SECTION 5 – FIREFIGHTING MEASURES

Flash Point: NA

Flammable Limits: NA

Extinguishing Media: Dry chemical, CO_2 foam

Auto Ignition Temperature: None

Special Fire Fighting Procedures: Normal cautions when dealing with chemicals.

Unusual Fire and Explosion Hazards: Will release small amounts of HCl upon decomposition

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions and Equipment: Use personal protective equipment.

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: Neutralize with soda ash or sodium bicarbonate, dilute with water. Mop up and arrange disposal. Keep in suitable, closed containers for disposal in accordance with local regulations.

SECTION 7 - HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

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 - CONTROL MEASURES

CONTROL PARAMETERS

OSHA Permissible Exposure Limit (PEL): 200 ppm

ACGIH Threshold Limit Value (TLV): 200 ppm

Engineering Controls: Use local exhaust ventilation to maintain air concentrations of vapors and fumes below occupational exposure standards.

Respiratory Protection: Where risk assessment shows air-purifying respirators are appropriate, use a full-face 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 supplied air 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: Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (USA) or EN 166 (EU)

Body Protection: Impervious clothing, flame retardant antistatic 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	White gel
Odor	None
Odor threshold	No data available
pH	No data available
Melting point/Freezing point	60°C / 140ºF
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	0.6
Flammability (Solid, gas)	No data available
Upper flammability or explosive limits	Not applicable
Lower flammability or explosive limits	Not applicable
Vapor pressure	No data available
Vapor density	No data available
Relative density	1.30 (Water = 1)
Solubility(ies)	Soluble in water
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	Not applicable
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, excessive cold, metals
Incompatibility: Alkalines, strong oxidizing or reducing materials, cyanides or combustible materials.
Hazardous Decomposition Products Hydrochloric acid, zinc chloride, zinc oxide
In the event of fire: See Section 5

SECTION 11 - TOXICOLOGICAL INFORMATION

Likely Route(s) of Exposure: Inhalation, ingestion, skin and eye contact
Acute toxicity No data available
Skin corrosion/irriation No data available
Serious eye damage/eye irritation No data available
Respiratory or skin sensitization No data available
Germ cell mutagenicity No data available
Carcinogenicity
This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC No component of this product 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 present at levels greater than or equal to 0.1% is identified as known or anticipated carcinogen by NTP.
OSHA No component of this product present at levels greater than or equal to 0.1% is identified as carcinogen or potential carcinogen by OSHA.

Reproductive toxicity No data available
Specific target organ toxicity – Single exposure
Respiratory system – May cause respiratory irritation
Specific target organ toxicity – Repeated exposure No data available
Aspiration hazard No data available
Additional information
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

SECTION 12 - ECOLOGICAL INFORMATION

This material has not been tested for environmental 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. Proper Shipping Name: Corrosive Liquid, Acidic, Inorganic, N.O.S. (Contains Zinc Chloride, Hydrochloric Acid)

Identification Number: UN3264 **Hazard Class:** 8

Packing Group: III

Type D.O.T Label Required Information: Corrosive

SECTION 15 - REGULATORY INFORMATION

SARA 302 Components No chemicals in this material are subject to the reporting requirement of SARA Title III, Section 302.

SARA 313 Components No chemicals in this material are subject to the reporting requirement of SARA Title III, Section 313

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.

SECTION 16 - OTHER INFORMATION

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.

Preparation information

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