

Safety Data Sheet

According to 1907-2006/EC, Article 31

Version: 1.0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Trade Name: CANFIELD WATER-SOLUBLE FLUX
Product Use: Soft Soldering Flux
Details of the supplier of the safety data sheet:
 This Safety Data Sheet has been updated in accordance with the Globally Harmonized System (GHS).
Manufacturer Name: Canfield Technologies , LLC. /BOW Electronic Solders
Address: 1 Crossman Road, Sayreville, NJ 08872
General Phone Number: 732-316-2100
INFOTRAC 24 Hour Emergency Telephone Number: 1-800-535-5053
SDS Creation Date 6-Jan-15
SDS Revision Date: 6-Jan-15

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Classification (CLP): N/A

Label Elements (CLP): N/A

Labeling according to Regulation (EC) No 1272/2008

The product is classified and labeled according to the CLP regulation.

Hazard pictograms



GHS08 Health Hazard



GHS05



GHS07

Signal word **Danger**

Hazard statements

R36 Irritating to eyes.
R37 Irritating to respiratory system
R38 Irritating to skin.
S-26 In case of eye contact, rinse thoroughly and get medical attention
S-27 Take off immediately contaminated clothing.
S-36/37/39 Wear suitable protective clothing, gloves, and eye/face protection.
S-45 In case of accident or if feel unwell call medical advice immediately.
H302 Harmful if swallowed.
H319 Causes serious eye irritation.
H401 Toxic to aquatic life.
H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.

P264 Wash ... 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 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P330 Rinse mouth.
P337+P313 IF eye irritation persists get medical advice/attention.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P304+P340. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P309+P311 IF exposed or you feel unwell: Call a POISON CENTER or doctor/physician.

3. COMPOSITION OF MIXTURE

Hazardous Ingredients

Chemical Name:	CAS No.	Wt.%	EINECS/ELINCS	OSHA PEL	Risk Phrases
Zinc Chloride	7646-85-7	1-3%	231-592-0	1 mg/m ³	H302, H314 H319, H335 H400, H401

This solder flux product does not contain any Substance of Very High Concern (SVHC) on the European Chemicals Agency (ECHA) Candidate list.

4. FIRST AID MEASURES

Description of first aid measures

After inhalation: Move victim to fresh air and get medical attention.

After skin contact: Quickly and gently, blot or brush away excess paste. Remove contaminated clothing and shoes. Immediately wash with warm water and soap and rinse thoroughly. If irritation develops, seek medical attention.

After eye contact: Rinse opened eye for several minutes under running water. Seek medical attention.

After swallowing: Call a physician or Poison Control Center at once.

Induce vomiting, if person is conscious. Seek medical help. Only induce vomiting at the instruction of a physician.

Information for doctor: Most important symptoms and effects, both acute and delayed.

Indication of any immediate medical attention and special treatment needed.

5. FIREFIGHTER MEASURES

Flammable Properties: Product will burn if involved in a fire but does not ignite readily.

Suitable extinguishing Media: CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Explosion Data: No sensitivity to mechanical impact or static discharge.

Unsuitable extinguishing Media: Not applicable.

Special hazards arising from the substance or mixture: In case of fire, the following can be released: Carbon dioxide, Carbon monoxide, ammonia hydrogen chloride. Smoke and Irritating toxic fumes may be formed.

Protective equipment: Wear self-contained respiratory and protective clothing should be worn. Remove unprotected personnel.

NFPA	Health:	0
	Flammability:	0
	Instability:	0

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Ensure adequate ventilation

Environmental precautions: Do not allow to enter sewers/ surface or ground water.

Methods for containment: Stop the spill if it is safe to do so. Contain spilled flux with sand or absorbent material which does not react with spilled material.

Methods for clean up: Scrape or scoop up the spilled product and collect for proper disposal, as described in Section 13 of this SDS.

Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See section 13 for disposal information.

7. HANDLING AND STORAGE

Handling:

Precautions for safe handling: Avoid contact with eyes and skin, do not breathe fumes. Do not ingest.

Keep out of reach of children, use this material with adequate ventilation. Keep container closed when not in use.

Wash thoroughly with detergent and water after handling, before eating, drinking, smoking or using the toilet.

Information about protection against explosions and fires: No special measures required.

Conditions for safe storage, including any incompatibilities

Storage: Store in a cool location. Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep receptacle tightly sealed. Store in dry conditions.

Specific end use (s) No further relevant information available.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

Ingredient

	ACGIH TLV (8-HR. TWA)	U.S. OSHA PEL (8-HR. TWA)	Ontario (Canada) TWAEV	UK OEL (8-HR. TWA)
Zinc Chloride	1mg/m ³ (FUME) 2mg/m ³ (STEL)	1mg/m ³ (FUME) 2mg/m ³ (STEL)	1mg/m ³ (FUME) 2mg/m ³ (STEL)	1mg/m ³ (FUME) 2mg/m ³ (STEL)

STEV = Short term Exposure Value.

STEL = Short Term Exposure Limit.

Exposure controls

Personal protective equipment: Workers must comply with PPE requirements of the workplace in which this product is handled.

Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work.

Breathing equipment:

Exposure controls: Use appropriate engineering control such as process enclosures', local exhaust ventilation to control airborne levels below recommended exposure limits.

When ventilation is not sufficient to remove airborne levels from the breathing zone, a NIOSH safety approved respirator or self-contained breathing apparatus should be worn. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

Protection of hands:



Protective gloves

Material of gloves:

Nitrile rubber, NBR

Natural rubber, NR

Eye protection:



Face shield, safety glasses

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

General Information:

Physical State:	Paste
Appearance :	White
pH-value:	Not measurable
Specific Gravity (water=1)	0.97
Boiling point/boiling range:	104°C/ 220°F
Melting Point:	60°C/ 140°F
Viscosity:	Not applicable
Oxidizing Properties:	Not applicable
Flash point :	Not applicable
Flammability (solid, gaseous):	Not determined.
Vapor pressure (mm Hg @ 25°C)	N/A
Vapor Density (Air=1):	N/A
Volatile Organic Compounds (VOC) Content:	0% or (0 g/L)
Solubility in Water:	Soluble
Odor Type:	Odorless
Odor Threshold:	Not applicable
Evaporation Rate (n-Butyl Acetate=1):	0.6
Auto Ignition Temperature(°C):	Not applicable
Flammability Limits (%):	Not established

10. STABILITY AND REACTIVITY

Reactivity

Chemical stability:	Stable at normal room temperature.
Possibility of hazardous reactions:	No dangerous reactions known
Conditions to avoid	None known.
Incompatible materials:	None known.
Hazardous decompositions products:	Toxic fumes of zinc, chloride and HCL may evolve during soldering.
Possibility of hazardous reactions :	Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicity Data:

Zinc Chloride:

Acute Toxicity Data

- 1) Oral: LD-50 (rat): Not available
2) Inhalation: LC-50 (rat): Not available
3) Dermal: LD-50 (rabbit): Not available
4) Skin Irritation: (rabbit): Not available

Chronic Toxicity Data

- 1) Repeated Skin Application: (rat): Not available
2) Eye Irritation: (rabbit): Not available

12. ECOLOGICAL INFORMATION

This material has not been tested for environmental effects.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Recommendation: Disposal must be disposed of in accordance to official regulations.

Uncleaned packaging: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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14. TRANSPORT INFORMATION

U.S. Hazardous Materials Regulation (DOT 49CFR):	Not regulated
Canadian Transportation of Dangerous Goods (TDG):	Not regulated
ADR/RID:	Not regulated
IMDG:	Not regulated
Marine Pollutants:	Not applicable.
ICAO/IATA	Not regulated

15. REGULATORY INFORMATION

Hazardous Chemical According to 29 CFR 1910.1200: NA

Carcinogenicity Classification: (Components Present at 0.1% or More)

International Agency for Research on Cancer (IARC): NA

American Conference of Governmental Industrial Hygienists (ACGIH): NA

National Toxicology Program (NTP): NA

Occupational Safety and Health Administration (OSHA): NA

All Components of this Product are Listed on the U.S. Toxic Substances Control Act Inventory or Otherwise Comply with TSCA Pre-manufacture Notification Requirements.

This product is RoHS compliant.

16. OTHER INFORMATION

Full Text of R-phrases:

Appearing in Section 3:

R36	Irritating to eyes.
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R38	Irritating to skin.
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S-36/37/39	Wear suitable protective clothing, gloves, and eye/face protection.
S-45	In case of accident or if feel unwell call medical advice immediately.

H302	Harmful if swallowed.
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H401	Toxic to aquatic life.
H314	Causes severe skin burns and eye damage.
H335	May cause respiratory irritation.
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P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
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The information contained herein is based on data considered accurate and is offered solely for information, consideration and investigation. Bow/Canfield Technologies extends no warranties, makes no representations and assumes no responsibility as to the accuracy, completeness or suitability of this data for any purchaser's use. This Safety Data Sheet relates only to this product and does not relate to use with any other material or in any process all chemical products should be used only by, or under the direction of, technically qualified personnel who are aware of the hazards involved and the necessity for reasonable care in handling. Hazard communication regulations require that employees must be trained on how to use a Safety Data Sheet as a source for hazard information.