



A LINCOLN ELECTRIC COMPANY

Bridgit® Burn Resistant Solder Paste Flux

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations
Revision Date: 07/23/2015 Date of issue: 07/23/2015

Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Mixture

Product Name: Bridgit® Burn Resistant Solder Paste Flux

Product Code: #0018

1.2. Intended Use of the Product

Soldering metal parts

1.3. Name, Address, and Telephone of the Responsible Party

Company

Harris Products Group

4501 Quality Place

Mason, OH 45040

(513) 234-9127

www.harrisproductsgroup.com

1.4. Emergency Telephone Number

Emergency Number : 3E Company- USA/Canada/Mexico +1 (888) 609-1762 Access Code: 333988

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Acute Tox. 4 (Oral) H302

Eye Dam. 1 H318

STOT SE 3 H335

STOT RE 2 H373

Asp. Tox. 1 H304

Aquatic Acute 1 H400

Aquatic Chronic 1 H410

Full text of H-phrases: see section 16

2.2. Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US)

: Danger

Hazard Statements (GHS-US)

: H302 - Harmful if swallowed.
H304 - May be fatal if swallowed and enters airways.
H318 - Causes serious eye damage.
H335 - May cause respiratory irritation.
H373 - May cause damage to organs through prolonged or repeated exposure.
H400 - Very toxic to aquatic life.
H410 - Very toxic to aquatic life with long lasting effects.

Precautionary Statements (GHS-US)

: P260 - Do not breathe vapors, mist, or spray.
P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, and eye protection.
P301+P310 - If swallowed: Immediately call a poison center or doctor.
P301+P312 - If swallowed: Call a poison center or doctor if you feel unwell.

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P304+P340 - If inhaled: Remove person to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 - Immediately call a poison center or doctor.
P314 - Get medical advice/attention if you feel unwell.
P330 - Rinse mouth.
P331 - Do NOT induce vomiting.
P391 - Collect spillage.
P403+P233 - Store in a well-ventilated place. Keep container tightly closed.
P405 - Store locked up.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. When heated to decomposition, emits toxic fumes. Flammable vapors can accumulate in head space of closed systems.

2.4. Unknown Acute Toxicity (GHS-US) No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable

3.2. Mixture

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Zinc chloride	(CAS No) 7646-85-7	15 - 30	Comb. Dust, H232 Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Paraffin oils	(CAS No) 8012-95-1	0.1 – 1, 1 – 5, 5 – 10, 10 – 30	Asp. Tox. 1, H304 Aquatic Chronic 4, H413
Ammonium chloride	(CAS No) 12125-02-9	5 – 10, 10 – 30	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319 Aquatic Acute 3, H402
Ethylene glycol	(CAS No) 107-21-1	5 - 10	Acute Tox. 4 (Oral), H302 STOT RE 2, H373

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If exposed or concerned: Get medical advice/attention.

Inhalation: If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

Skin Contact: Remove contaminated clothing. Gently wash with plenty of soap and water followed by rinsing with water for at least 15 minutes. Call a POISON CENTER or doctor if you feel unwell. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for at least 60 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. IF SWALLOWED: Immediately call a POISON CENTER or doctor.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: May be fatal if swallowed and enters airways. Causes severe skin burns and eye damage. May cause damage to organs through prolonged or repeated exposure. Harmful if swallowed. May cause respiratory irritation.

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Inhalation: If vapors of this product are inhaled, irritation of the nose and respiratory system can occur.

Skin Contact: Overexposure may be irritating to skin.

Eye Contact: Causes serious eye damage. Redness. Pain. Blurred vision. Severe burns.

Ingestion: May be fatal if swallowed and enters airways. Ingestion is not anticipated to be a route of occupational exposure for this product. If this flux is ingested, nausea, vomiting, and diarrhea may occur (depending on the amount of the product swallowed). Severe ingestion exposures may result in damage to the tissues of the gastrointestinal system, kidney failure and death.

Chronic Symptoms: May cause damage to organs through prolonged or repeated exposure. Chronic ingestion may cause damage to the kidneys.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire. Application of water stream to hot product may cause frothing and increase fire intensity.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

Firefighting Instructions: Use water spray or fog for cooling exposed containers.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Upon thermal decomposition: irritating fumes and toxic gases (including hydrogen chloride, zinc oxides, carbon monoxide, carbon dioxide, and nitrogen oxides).

Other Information: Do not allow run-off from fire fighting to enter drains or water courses. Do not allow the product to be released into the environment.

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid all contact with skin, eyes, or clothing. Avoid breathing vapor, mist, spray.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Eliminate ignition sources. Stop leak if safe to do so.

6.2. Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if paste enters sewers or public waters.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Absorb and/or contain spill with inert material, then place in suitable container. Do not take up in combustible material such as: saw dust or cellulosic material. Use only non-sparking tools.

6.4. Reference to Other Sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: When heated to decomposition, emits toxic fumes. Flammable vapors may accumulate in the head space of closed systems. Container may remain hazardous when empty.

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Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Wash hands and forearms thoroughly after handling.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Use explosion proof equipment. Ground/bond container and receiving equipment. Prevent build-up of electrostatic charges (e.g., by grounding).

Storage Conditions: Store in a well-ventilated place. Keep container tightly closed. Keep/Store away from extremely high or low temperatures, ignition sources, combustible materials, incompatible materials.

Incompatible Materials: Strong bases. Strong acids. Strong oxidizers.

7.3. Specific End Use(s) Soldering metal parts

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Zinc chloride (7646-85-7)		
Mexico	OEL TWA (mg/m ³)	1 mg/m ³ (fume)
Mexico	OEL STEL (mg/m ³)	2 mg/m ³ (fume)
USA ACGIH	ACGIH TWA (mg/m ³)	1 mg/m ³ (fume)
USA ACGIH	ACGIH STEL (mg/m ³)	2 mg/m ³ (fume)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	1 mg/m ³ (fume)
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	1 mg/m ³ (fume)
USA NIOSH	NIOSH REL (STEL) (mg/m ³)	2 mg/m ³ (fume)
USA IDLH	US IDLH (mg/m ³)	50 mg/m ³ (fume)
Alberta	OEL STEL (mg/m ³)	2 mg/m ³ (fume)
Alberta	OEL TWA (mg/m ³)	1 mg/m ³ (fume)
British Columbia	OEL STEL (mg/m ³)	2 mg/m ³ (fume)
British Columbia	OEL TWA (mg/m ³)	1 mg/m ³ (fume)
Manitoba	OEL STEL (mg/m ³)	2 mg/m ³ (fume)
Manitoba	OEL TWA (mg/m ³)	1 mg/m ³ (fume)
New Brunswick	OEL STEL (mg/m ³)	2 mg/m ³ (fume)
New Brunswick	OEL TWA (mg/m ³)	1 mg/m ³ (fume)
Newfoundland & Labrador	OEL STEL (mg/m ³)	2 mg/m ³ (fume)
Newfoundland & Labrador	OEL TWA (mg/m ³)	1 mg/m ³ (fume)
Nova Scotia	OEL STEL (mg/m ³)	2 mg/m ³ (fume)
Nova Scotia	OEL TWA (mg/m ³)	1 mg/m ³ (fume)
Nunavut	OEL STEL (mg/m ³)	2 mg/m ³ (fume)
Nunavut	OEL TWA (mg/m ³)	1 mg/m ³ (fume)
Northwest Territories	OEL STEL (mg/m ³)	2 mg/m ³ (fume)
Northwest Territories	OEL TWA (mg/m ³)	1 mg/m ³ (fume)
Ontario	OEL STEL (mg/m ³)	2 mg/m ³ (fume)
Ontario	OEL TWA (mg/m ³)	1 mg/m ³ (fume)
Prince Edward Island	OEL STEL (mg/m ³)	2 mg/m ³ (fume)
Prince Edward Island	OEL TWA (mg/m ³)	1 mg/m ³ (fume)
Québec	VEMP (mg/m ³)	1 mg/m ³ (fume)
Saskatchewan	OEL STEL (mg/m ³)	2 mg/m ³ (fume)
Saskatchewan	OEL TWA (mg/m ³)	1 mg/m ³ (fume)
Yukon	OEL STEL (mg/m ³)	2 mg/m ³ (fume)
Yukon	OEL TWA (mg/m ³)	1 mg/m ³ (fume)
Ammonium chloride (12125-02-9)		
Mexico	OEL TWA (mg/m ³)	10 mg/m ³ (fume)

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Mexico	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
USA ACGIH	ACGIH TWA (mg/m ³)	10 mg/m ³ (fume)
USA ACGIH	ACGIH STEL (mg/m ³)	20 mg/m ³ (fume)
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	10 mg/m ³ (fume)
USA NIOSH	NIOSH REL (STEL) (mg/m ³)	20 mg/m ³ (fume)
Alberta	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
Alberta	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
British Columbia	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
British Columbia	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Manitoba	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
Manitoba	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
New Brunswick	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
New Brunswick	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Newfoundland & Labrador	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
Newfoundland & Labrador	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Nova Scotia	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
Nova Scotia	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Nunavut	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
Nunavut	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Northwest Territories	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
Northwest Territories	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Ontario	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
Ontario	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Prince Edward Island	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
Prince Edward Island	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Québec	VECD (mg/m ³)	20 mg/m ³ (fume)
Québec	VEMP (mg/m ³)	10 mg/m ³ (fume)
Saskatchewan	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
Saskatchewan	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Yukon	OEL STEL (mg/m ³)	20 mg/m ³ (fume)
Yukon	OEL TWA (mg/m ³)	10 mg/m ³ (fume)
Ethylene glycol (107-21-1)		
Mexico	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol)
USA ACGIH	ACGIH Ceiling (mg/m ³)	100 mg/m ³ (aerosol only)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
Alberta	OEL Ceiling (mg/m ³)	100 mg/m ³
British Columbia	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol)
British Columbia	OEL Ceiling (ppm)	50 ppm (vapour)
British Columbia	OEL STEL (mg/m ³)	20 mg/m ³ (particulate)
British Columbia	OEL TWA (mg/m ³)	10 mg/m ³ (particulate)
Manitoba	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol only)
New Brunswick	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol)
Newfoundland & Labrador	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol only)
Nova Scotia	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol only)
Nunavut	OEL Ceiling (mg/m ³)	127 mg/m ³ (vapour)
Nunavut	OEL Ceiling (ppm)	50 ppm (vapour)
Nunavut	OEL STEL (mg/m ³)	20 mg/m ³ (particulate)
Nunavut	OEL TWA (mg/m ³)	10 mg/m ³ (particulate)
Northwest Territories	OEL Ceiling (mg/m ³)	127 mg/m ³ (vapour)
Northwest Territories	OEL Ceiling (ppm)	50 ppm (vapour)
Northwest Territories	OEL STEL (mg/m ³)	20 mg/m ³ (particulate)

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Northwest Territories	OEL TWA (ppm)	10 ppm (particulate)
Ontario	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol only)
Prince Edward Island	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol only)
Québec	PLAFOND (mg/m ³)	127 mg/m ³ (mist and vapour)
Québec	PLAFOND (ppm)	50 ppm (mist and vapour)
Saskatchewan	OEL Ceiling (mg/m ³)	100 mg/m ³ (aerosol)
Yukon	OEL STEL (mg/m ³)	20 mg/m ³ (particulate) 325 mg/m ³ (vapour)
Yukon	OEL STEL (ppm)	10 ppm (particulate) 125 ppm (vapour)
Yukon	OEL TWA (mg/m ³)	10 mg/m ³ (particulate) 250 mg/m ³ (vapour)
Yukon	OEL TWA (ppm)	100 ppm (vapour)
Paraffin oils (8012-95-1)		
Mexico	OEL TWA (mg/m ³)	5 mg/m ³
Mexico	OEL STEL (mg/m ³)	10 mg/m ³
USA ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable fraction)
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen highly and severely refined, Suspected Human Carcinogen highly and severely refined
USA OSHA	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	5 mg/m ³
USA NIOSH	NIOSH REL (STEL) (mg/m ³)	10 mg/m ³
USA IDLH	US IDLH (mg/m ³)	2500 mg/m ³
Alberta	OEL STEL (mg/m ³)	10 mg/m ³
Alberta	OEL TWA (mg/m ³)	5 mg/m ³
British Columbia	OEL TWA (mg/m ³)	0.2 mg/m ³ (mildly refined) 1 mg/m ³ (severely refined)
Manitoba	OEL TWA (mg/m ³)	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable fraction)
New Brunswick	OEL STEL (mg/m ³)	10 mg/m ³
New Brunswick	OEL TWA (mg/m ³)	5 mg/m ³ (as sampled by a method that does not collect vapor)
Newfoundland & Labrador	OEL TWA (mg/m ³)	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable fraction)
Nova Scotia	OEL TWA (mg/m ³)	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable fraction)
Nunavut	OEL STEL (mg/m ³)	10 mg/m ³
Nunavut	OEL TWA (mg/m ³)	5 mg/m ³
Northwest Territories	OEL STEL (mg/m ³)	10 mg/m ³
Northwest Territories	OEL TWA (mg/m ³)	5 mg/m ³
Ontario	OEL TWA (mg/m ³)	5 mg/m ³ (pure, highly and severely refined, excluding metal working fluids-inhalable)
Prince Edward Island	OEL TWA (mg/m ³)	5 mg/m ³ (excluding metal working fluids, highly & severely refined-inhalable fraction)
Québec	VECD (mg/m ³)	10 mg/m ³ (mist)
Québec	VEMP (mg/m ³)	5 mg/m ³ (mist)
Saskatchewan	OEL STEL (mg/m ³)	10 mg/m ³
Saskatchewan	OEL TWA (mg/m ³)	5 mg/m ³
Yukon	OEL STEL (mg/m ³)	10 mg/m ³
Yukon	OEL TWA (mg/m ³)	5 mg/m ³

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8.2. Exposure Controls

Appropriate Engineering Controls: Ensure all national/local regulations are observed. Ensure adequate ventilation, especially in confined areas. Gas detectors should be used when toxic gases may be released. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Personal Protective Equipment: Avoid all unnecessary exposure. Gloves. Protective clothing. Protective goggles. Face shield.

Insufficient ventilation: wear respiratory protection.



Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles and a full face shield.

Skin and Body Protection: Wear suitable protective clothing. Wash contaminated clothing before reuse.

Respiratory Protection: Use an approved air-purifying or supplied-air respirator where airborne concentrations of vapor or mist are expected to exceed exposure limits.

Environmental Exposure Controls: Do not allow the product to be released into the environment.

Consumer Exposure Controls: Do not eat, drink or smoke during use

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State	: Liquid (Paste)
Appearance	: Light tan
Odor	: Not appreciable
Odor Threshold	: Not available
pH	: Not available
Evaporation Rate	: Not available
Melting Point	: Not available
Freezing Point	: Not available
Boiling Point	: Not available
Flash Point	: Not available
Auto-ignition Temperature	: Not available
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available
Relative Vapor Density at 20 °C	: Not available
Relative Density	: Not available
Specific Gravity	: Not available
Solubility	: Not available
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: Not available
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	: Not expected to present an explosion hazard due to static discharge.

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SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity:** Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability:** Product is stable under normal conditions of use.
- 10.3. Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures. Open flame. Overheating. Heat. Sparks. Incompatible materials.
- 10.5. Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.
- 10.6. Hazardous Decomposition Products:** Upon thermal decomposition: irritating fumes and toxic gases (including hydrogen chloride, zinc oxides, carbon monoxide, carbon dioxide, and nitrogen oxides).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity: Oral: Harmful if swallowed.

LD50 and LC50 Data:

Bridgit® Burn Resistant Solder Paste Flux	
ATE US (oral)	1,774.19 mg/kg body weight

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Causes serious eye damage.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not classified.

Carcinogenicity: Not classified.

Specific Target Organ Toxicity (Repeated Exposure): May cause damage to organs through prolonged or repeated exposure.

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Aspiration Hazard: May be fatal if swallowed and enters airways.

Symptoms/Injuries After Inhalation: May cause respiratory irritation.

Symptoms/Injuries After Skin Contact: Overexposure may be irritating to skin.

Symptoms/Injuries After Eye Contact: Causes serious eye damage. Redness. Pain. Blurred vision. Severe burns.

Symptoms/Injuries After Ingestion: May be fatal if swallowed and enters airways.

Chronic Symptoms: May cause damage to organs through prolonged or repeated exposure.

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Zinc chloride (7646-85-7)	
LD50 Oral Rat	1100 mg/kg
Ammonium chloride (12125-02-9)	
LD50 Oral Rat	1650 mg/kg
Ethylene glycol (107-21-1)	
LD50 Dermal Rat	10600 mg/kg
ATE US (oral)	500.00 mg/kg body weight
Paraffin oils (8012-95-1)	
LC50 Inhalation Rat	2062 ppm/4h
Paraffin oils (8012-95-1)	
IARC Group	1

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Very toxic to aquatic life with long lasting effects.

Zinc chloride (7646-85-7)	
LC50 Fish 1	727 µg/l
EC50 Daphnia 1	330 µg/l

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Ammonium chloride (12125-02-9)	
LC50 Fish 1	209 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [static])
EC50 Daphnia 1	161 mg/l
LC 50 Fish 2	42.91 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
Ethylene glycol (107-21-1)	
LC50 Fish 1	41000 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
EC50 Daphnia 1	46300 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC 50 Fish 2	14 - 18 ml/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])

12.2. Persistence and Degradability

Bridgit® Burn Resistant Solder Paste Flux	
Persistence and Degradability	May cause long-term adverse effects in the environment.

12.3. Bioaccumulative Potential

Bridgit® Burn Resistant Solder Paste Flux	
Bioaccumulative Potential	Not established.
Zinc chloride (7646-85-7)	
BCF Fish 1	16000
Ethylene glycol (107-21-1)	
Log Pow	-1.93

12.4. Mobility in Soil Not available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

Additional Information: Handle empty containers with care because residual vapors are flammable. Flammable vapors may accumulate in the container.

Ecology – Waste Materials: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

SECTION 14: TRANSPORT INFORMATION

- 14.1. In Accordance with DOT** Not regulated for transport
- 14.2. In Accordance with IMDG** Not regulated for transport
- 14.3. In Accordance with IATA** Not regulated for transport
- 14.4. In Accordance with TDG** Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

Bridgit® Burn Resistant Solder Paste Flux	
SARA Section 311/312 Hazard Classes	Delayed (chronic) health hazard Immediate (acute) health hazard
Zinc chloride (7646-85-7)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Ammonium chloride (12125-02-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
Ethylene glycol (107-21-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on United States SARA Section 313	
EPA TSCA Regulatory Flag	Y2 - Y2 - indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

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SARA Section 313 - Emission Reporting	1.0 %
Paraffin oils (8012-95-1)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	

15.2. US State Regulations

Zinc chloride (7646-85-7)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List
Ammonium chloride (12125-02-9)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List
Ethylene glycol (107-21-1)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) List
Paraffin oils (8012-95-1)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

15.3. Canadian Regulations

Bridgit® Burn Resistant Solder Paste Flux	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects Class E - Corrosive Material
 	
Zinc chloride (7646-85-7)	
Listed on the Canadian DSL (Domestic Substances List) Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class E - Corrosive Material
Ammonium chloride (12125-02-9)	
Listed on the Canadian DSL (Domestic Substances List) Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class D Division 2 Subdivision B - Toxic material causing other toxic effects
Ethylene glycol (107-21-1)	
Listed on the Canadian DSL (Domestic Substances List) Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class D Division 1 Subdivision B - Toxic material causing immediate and serious toxic effects Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

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Paraffin oils (8012-95-1)	
Listed on the Canadian DSL (Domestic Substances List)	
Listed on the Canadian IDL (Ingredient Disclosure List)	
IDL Concentration 1 %	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date : 07/23/2015

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Acute Tox. 4 (Inhalation:dust,mist)	Acute toxicity (inhalation:dust,mist) Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 1	Hazardous to the aquatic environment - Acute Hazard Category 1
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Aquatic Chronic 1	Hazardous to the aquatic environment - Chronic Hazard Category 1
Aquatic Chronic 4	Hazardous to the aquatic environment - Chronic Hazard Category 4
Asp. Tox. 1	Aspiration hazard Category 1
Comb. Dust	Combustible Dust
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Skin Corr. 1B	Skin corrosion/irritation Category 1B
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H232	May form combustible dust concentrations in air
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H319	Causes serious eye irritation
H332	Harmful if inhaled
H335	May cause respiratory irritation
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H402	Harmful to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life

Party Responsible for the Preparation of This Document

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#0018

Harris Products Group cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for use, handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. No warranty, expressed, or implied, is given.

NA GHS SDS