Material Safety Data Sheet

Hi-Temp Silver Brazing Paste Flux

Section 1: Product Information

Supplier's Name

TECHNIWELD

Address

2300 Winston Park Dr
Oakville, ON L6H 7T7

Telephone Number
(905) 829-8780
1-800-268-4833

Trade Name: N/A

Chemical Formula: N/A

Manufacturer's Name
The Gasflux Company

Address

32 Hawthorne Street
P.O. Box 1170
Elyria, Ohio 44036

Telephone Number
Chemtrec (24 Hour)
1-800-424-9300

Product Use
Brazing

Section 2: Hazardous Ingredients

Ingredient	Approximate Concentration %	CAS #	OSHA PEL mg/m3	ACGIH-TLV mg/m3	LC50	LD50
Potassium Fluoborate	30-50	14075-53-7	2.5	2.5	N/A	N/A
Potassium Bifluoride	10-30	7789-29-9	2.5	2.5	N/A	N/A
Potassium Pentaborate	20-35	11128-29-3	2.5	2.5	N/A	N/A
Boric Acid	1-5	10043-35-3	Not Listed	Not Listed	N/A	N/A
Boron	1-5	7740-48-8	Not Listed	Not Listed	N/A	N/A
Water & Wetting Agent	Rem.		Not Listed	Not Listed	N/A	N/A

Section 3: Physical Data

Physical State: **Solid**	Boiling Point: 212ºF (100ºC)
Odour and Appearance:**Black Paste. Odorless.**	Melting Point: 1100ºF (593ºC)
Odour Threshold(PPM) N/A	Solubility in Water(20)Moderately soluble
Specific Gravity: 1**.963 (approx.)**	% Volatile (by Volume) N/A
Vapour Pressure(MM) N/A	PH: N/A
Vapour Density (Air =1) N/A	Coefficient of Water/Oil Distribution: N/A
Evaporation Rate: N/A	

Section 4: Fire or Explosion Hazard

Flammable: No
Means of Extinction: N/A
Flashpoint: N/A
Upper Explosion Limit (% by volume): N/A
Lower Explosion Limit (% by volume): N/A
Auto ignition Temperature: N/A
Hazardous Combustion Products: N/A
Explosion data-sensitivity to mechanical impact: N/A
Explosion data-sensitivity to static discharge: N/A

Section 5: Reactivity Data

Chemical Stability:	Yes
Incompatibility to other substances:	Yes
If so, which ones?	Strong Acids and Alkalis, Elemental Potassium, Concentrated Oxidizing Agents
Reactivity under what conditions?	N/A
Hazardous decomposition by-products:	See Below

Brazing fumes and gases cannot be classified simply. The composition and quality of both are dependent upon the metal being razed, the process, procedures, and filler metals being used. Other conditions which also influence the composition and quality of the fumes and gases to which workers may be exposed include: coatings on the metal being brazed (such as paint, plating, or galvanizing), the number of operators and the volume of the work area, the type of brazing alloy being used, the quality and amount of ventilation, the position of the operator's head in respect to the fume plume, as well as contaminants in the atmosphere (such as chlorinated hydrocarbon vapors from cleaning and degreasing activities.) When the flux and the filler metal are consumed, the fume and gas decomposition products generated are different in percent and form from the ingredients in Section 2. Fume and gas decomposition products from brazing alloy and base metal, not just the ingredients of the flux are important.

Section 5: Reactivity Data (continued)

The concentrations of a given fume or gas component may decrease many times in the original concentration during brazing.
Also, new compounds may form. Decomposition products of normal operation include those originating from the volatilization reaction, or oxidation of the wire or rods and flux plus those from the base metal and coating. Reasonably expected by-products include fumes containing oxides of boron (TWA 10mg/m3) and fluorides (TWA 2.5mg/m3).

Section 6: Toxicological Properties

Route of Entry:

Skin Contact:	**Yes**
Skin Absorption:	**No**
Eye Contact:	**No**
Inhalation Acute:	**Yes**
Inhalation Chronic:	**Yes**
Ingestion:	**Yes**

Avoid breathing fumes of any brazing operation. Actual exposure limits should be determined by monitoring the fumes in the brazer's breathing zone. Avoid fumes or paste contacting eyes, mucous membranes, or skin. Do not ingest.

Effects of acute exposure to material:
Fumes may cause eye, skin and respiratory irritation.
Paste may cause eye and skin irritation.
Ingestion may cause weakness, abdominal pain, vomiting and diarrhea.

May aggravate existing respiratory and or skin ailments.

Effects of chronic exposure to material:
Long term exposure to high levels of fluorides may cause weakening and degeneration of bone structures and or calcification of ligaments (Fluorosis).

Exposure Limits	N/A	Reproductive Toxicity	N/A
Irritancy of Material	N/A	Teratogenicity	N/A
Sensitization to Material	N/A	Mutagenicity	N/A
Carcinogenicity	N/A	Toxicologically synergistic products	N/A

Section 7: Preventive Measures

Personal Protective Equipment:
*Respiratory Protection: Use approved fume respirator or air supplied respirator when brazing in a confined space or where local exhaust ventilation does not keep exposure below the applicable TLV-TWA**.**

*****Wear appropriate rubber gloves when handling the material

* Wear face shield or protective specs with side shields. Use appropriate shaded eye protection when brazing.

Engineering Controls:
Use enough ventilation and local exhaust at the flame site to keep the fumes below the threshold limit value-time weighted average (TLV-TWA) for welding fumes of 5 mg/m3 in the brazer's breathing zone and in the general air. Train the employee to keep head out of the fumes.

Leak or Spill Procedure:
Avoid contact with skin or eyes.
Sweep or shovel into the container.
Dilute and wash remaining with water and dispose in accordance with local, provincial and federal regulations.

Handling procedures and equipment:
Avoid contact with skin or eyes.
Wash thoroughly after handling

Waste Disposal:
Dispose of in accordance with local, provincial and federal regulations.

Storage Requirements: Store with container closed.

Special Shipping Information: N/A

Section 8: First Aid Measures

Inhalation: Remove from exposure to fumes. If breathing has stopped, perform artificial respiration and call physician.

Ingestion: Induce vomiting.

Eye or Skin Contact: Copiously flush with water.

Section 9: Preparation Information

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