

(10171)



**Material Safety Data Sheet**

**110 Nickel Silver Brazing Paste Flux**

**Section 1: Product Information**

Supplier's Name

**TECHNIWELD**

Address

2300 Winston Park Dr  
Oakville, ON L6H 7T7

Telephone Number

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

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	ACGIH-TLV		
			mg/m3	mg/m3	LC50	LD50
Boric Acid	40-70	10043-35-3	Not listed	Not listed	N/A	N/A
Sodium Tetraborate Decahydrate	5-10	1303-96-4	Not listed	Not listed	N/A	N/A
Water & Wetting Agent	Rem.		Not listed	Not listed	N/A	N/A

**APPROVED MATERIAL**

FEB 02 2012

MSDS # 10171

APPROVED BY *[Signature]*

**Section 3: Physical Data**

Physical State: <b>Solid</b>	Boiling Point: 212°F (100°C)
Odour and Appearance: <b>Light Blue Paste. Odorless.</b>	Melting Point: 1050°F (566°C)
Odour Threshold(PPM) N/A	Solubility in Water(20) Moderately soluble
Specific Gravity: <b>1.472 (approx.)</b>	% 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? Materials to avoid: Elemental Zirconium, Potassium Acetic Anhydride  
 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).

**Section 6: Toxicological Properties****Route of Entry:**

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

**Contains no fluorides; is not corrosive. Avoid breathing fumes. 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: **None**

Exposure Limits	<b>5 mg/M3</b>	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.**

**Section 7: Preventive Measures (continued)**

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/m<sup>3</sup> 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: 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: Dilute and wash remaining with water and 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: If paste is swallowed, induce vomiting.**

**Eye or Skin Contact: If paste contacts skin or eyes, copiously flush with water.**

**Section 9: Preparation Information**

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1-800-268-4833

Date Prepared: January 1, 2012

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