

Section 1: Product and Company Identification

<i>Product Identifier:</i>	Type "B" Bronze and Nickel-Silver Brazing Paste Flux
<i>Product Use:</i>	All-purpose high temperature paste flux for brazing with bronze and nickel-silver alloys
<i>Item Code:</i>	1101
<i>Supplier Name:</i>	PowerWeld Inc.
<i>Supplier Address:</i>	2501 Beech Street Valparaiso, IN 46383
<i>Supplier Web Address:</i>	www.powerweldinc.com
<i>Supplier Phone:</i>	219-462-8700 1-800-826-9073
<i>Manufacturer:</i>	The Gasflux Company
<i>Manufacturer Address:</i>	32 Hawthorne Street Elyria, OH 44036
<i>Manufacturer Web Address:</i>	www.gasflux.com
<i>Manufacturer Phone:</i>	1-440-365-1941
<i>Emergency Phone:</i>	CHEMTREC (24-hour) 1-800-424-9300
<i>Prepared By:</i>	PowerWeld Inc.
<i>Preparation Date:</i>	20 June 2016

Section 2: Hazard Identification

Classification: Reproductive toxicity Category 2

Label Elements:



Other Hazards:

Hazard Phrases

- H303 May be harmful if swallowed.
- H313 May be harmful in contact with skin.
- H319 Causes serious eye irritation.
- H361 Suspected of damaging fertility or the unborn child.

Precautionary Phrases

- P202 Do not handle until all safety precautions have been read and understood.
- P280 Wear eye protection.
- P308+ If exposed or concerned:
- P313 Get medical advice/attention.
- P305+ IF IN EYES:
- P351+ Rinse cautiously with water for several minutes.
- P338 Remove contact lenses, if present and easy to do. Continue rinsing.
- P501 Dispose of contents/container in accordance with local regulations.

Section 3: Composition/Information on Hazardous Ingredients

HAZARDOUS INGREDIENTS	CAS NUMBER	APPROXIMATE CONCENTRATION (%)
Boric Acid	10043-35-3	40 - 10
Water	Proprietary	Balance
Sodium Tetraborate Decahydrate	1303-96-4	5 - 10

Section 4: First-aid Measures

<i>Inhalation:</i>	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if symptoms persist or if unconscious.
<i>Ingestion:</i>	Induce vomiting ONLY if the victim is fully conscious. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.
<i>Eye Contact:</i>	Immediately flush with plenty of clean water for at least 15 minutes. Make sure to flush under the eyelids. Consult a physician for definitive treatment.
<i>Skin Contact:</i>	Remove with soap and water. Continue flushing with water for several minutes. Use skin cream to counter resulting dryness. Consult a physician if irritation continues or if large skin area is affected.
<i>Symptoms:</i>	May cause skin irritation. May cause irritation to the mucous membranes and upper respiratory tract. Ingestion may cause weakness, abdominal pain, vomiting and diarrhea.

NOTE: In all severe cases, contact physician immediately. Local telephone operators can provide number of regional poison control centre.

Section 5: Fire-fighting Measures

<i>Flammable:</i>	Non-flammable
<i>Means of Extinction:</i>	Not determined
<i>Auto-ignition Temperature:</i>	Not available
<i>Hazardous Combustion Products:</i>	Not available
<i>Explosion Data Sensitivity to Mechanical Impact:</i>	Not available
<i>Explosion Data Sensitivity to Static Discharge:</i>	Not available
<i>Special Equipment:</i>	Not available
<i>Precautions for Fire Fighters:</i>	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures

<i>Protective Equipment:</i>	See Section 8
<i>Emergency Procedures:</i>	Not applicable
<i>Leak or Spill Procedure:</i>	Prevent further leakage or spillage if safe to do so. Sweep up and shovel into suitable containers for disposal. Dilute and wash remaining with water and dispose of in accordance with local, regional and federal regulations.

Section 7: Handling and Storage

<i>Handling Procedures and Equipment:</i>	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protection recommended in Section 8. Wash thoroughly after handling. Use only in well-ventilated areas. Do not breathe dust/fume/gas/mist/vapor/spray.
<i>Storage Requirements:</i>	Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.
<i>Incompatibilities:</i>	Elemental zirconium; potassium acetic anhydride

Section 8: Exposure Controls/Personal Protection

Exposure Limits:

HAZARDOUS INGREDIENTS	CAS NUMBER	ACGIH TLV (mg/m³)	OSHA PEL (mg/m³)
Boric Acid	10043-35-3	STEL: 6(inhal) TWA: 2(inhal)	-
Sodium Tetraborate Decahydrate	1303-96-4	STEL: 6(inhal) TWA: 2(inhal)	TWA: 5

Engineering Controls:

Use enough ventilation and local exhaust at the flame site to keep the fumes below the exposure limits listed above. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Showers and/or eyewash stations are recommended.

Personal Protective Equipment:

Eyes - Safety glasses with side-shields. Where eye contact could occur, chemical splash proof goggles are recommended.
Skin - Wear impervious protective clothing, including boots, rubber gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
General Hygiene - Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes and clothing. Wash hands and face before breaks and immediately after handling the product. Avoid breathing vapors, mist or gas.

Section 9: Physical and Chemical Properties

<i>Physical State:</i>	Solid
<i>Odor and Appearance:</i>	Odorless light blue paste
<i>Odor Threshold (ppm):</i>	Not available
<i>pH:</i>	Not available
<i>Melting Point:</i>	566°C / 1050°F
<i>Freezing Point:</i>	Not available
<i>Boiling Point:</i>	Not available
<i>Flashpoint:</i>	Not applicable
<i>Upper Flammable Limit (% by volume):</i>	Not applicable
<i>Lower Flammable Limit (% by volume):</i>	Not applicable

Section 10: Stability and Reactivity

<i>Chemical Stability:</i>	Stable under recommended storage conditions
<i>Possible Hazardous Reactions:</i>	None under normal storage conditions
<i>Conditions to Avoid:</i>	Keep out of reach of children
<i>Materials to Avoid (Incompatibilities):</i>	Elemental zirconium; potassium acetic anhydride
<i>Conditions of Reactivity:</i>	None under normal storage conditions

Hazardous Decomposition By-Products: Welding fumes and gases cannot be classified simply. The composition and quantity of both are dependent upon the metal being welded, the process, procedure and welding consumables used. Other conditions which also influence the composition and quantity of the fumes and gases to which workers may be exposed include: coating on the metal being welded (i.e. paint, painting, galvanizing), the number of welders, the volume of the work area, the quality and the amount of ventilation, the position of the welder's head with respect to the fume plume, as well as the presence of contaminants in the atmosphere (such as chlorinated hydrocarbon vapors from the cleaning and degreasing activities). When an electrode is consumed, the fume and gas decomposition products generated are different in percent and form from the ingredients listed in Section 3. Fume and gas decomposition, and not the ingredients in the electrode, are important. The concentration of a given fume or gas component may decrease or increase by many times the original concentration. Also, new compounds not in the electrodes may form. Decomposition products of normal operation include those originating from the volatilization, reaction or oxidation of the materials shown in Section 3, plus those from the base metal coating, etc., as noted above. Gaseous reaction products may include carbon monoxide and carbon dioxide. Ozone and nitrogen oxides may be formed by the radiation from the arc. Determine the composition and quantity of fumes and gases to which workers are exposed by taking an air sample from inside the welder's helmet if worn or in the worker's breathing zone. Improve ventilation if exposures are not below limits. See ANSI/AWS F1.1, F1.3 and F1.5, available from the American Welding Society, 550 N.W. LeJeune Road, Miami, FL 33126.

Hazardous Polymerization: Does not occur

Section 11: Toxicological Information

<i>Skin Contact:</i>	May be harmful in contact with skin.
<i>Skin Absorption:</i>	Not available
<i>Eye Contact:</i>	Avoid contact with eyes.
<i>Inhalation:</i>	Fatal if inhaled.
<i>Ingestion:</i>	May be harmful if swallowed.
<i>Symptoms:</i>	May cause skin and eye irritation. May cause irritation to the mucous membranes and upper respiratory tract. Ingestion may cause weakness, abdominal pain, vomiting, and diarrhea.
<i>Effects of Acute Exposure:</i>	Not available
<i>Effects of Chronic Exposure:</i>	Not available
<i>Irritancy of Product:</i>	See above
<i>Sensitization to Product:</i>	See above
<i>Carcinogenicity:</i>	This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
<i>Reproductive Effects:</i>	May damage fertility or the unborn child.
<i>Respiratory Sensitization:</i>	Not available
<i>Toxicological Data:</i>	<u>Boric Acid</u> Oral, rat: 2660 mg/kg (LD50) Dermal, rabbit: >2000 mg/kg (LD50) Inhalation, rat: >0.16 mg/L [4hr] (LC50)

Section 12: Ecological Information

Aquatic and Terrestrial Toxicity:

Boric Acid

Fish – 1020: 72 hr *Carassius auratus* mg/L LC50 flow through
Crustacea – 115-153” 48 hr *Daphnia magna* mg/L EC50

Persistence and Degradability:

Not determined

Bio accumulative Potential:

Not determined

Soil Mobility:

Boric Acid

Partition coefficient = - 0.757

Section 13: Disposal Considerations

NOTE: Always dispose of waste in accordance with local, provincial and federal regulations.

Safe Handling:

See Section 8

Methods of Disposal:

Empty containers should be taken for local recycling, recovery or waste disposal. Dispose of waste in accordance with all federal, regional and local regulations.

Section 14: Transportation Information

This product is not regulated.

Section 15: Regulatory Information

California Proposition 65:

This product does not contain any Proposition 65 chemicals.

Massachusetts Right to Know:

Information:

Sodium Tetraborate Decahydrate

New Jersey Right to Know Information

Sodium Tetraborate Decahydrate

Pennsylvania Right to Know:

Information:

Sodium Tetraborate Decahydrate

Canada Controlled Products

Regulations:

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

Section 16: Other Information

Preparation Date:

20 June 2016

Date of Last Revision:

20 June 2016

This SDS format is in accordance with GHS. PowerWeld Inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Product use and conditions of use are beyond the control of PowerWeld. Warranty of materials is limited to test results of product performance as detailed in certificates of compliance. Interpretation of test results is the responsibility of end-user. No other warranties, expressed or implied, are made.