# Material Safety Data Sheet

Promax Low Temp White Flux Paste 250g

Section 1:	Product Information				
Product Descrip	ion & Use:				
Promax Low Ten	np White Flux Paste 250g is an all-purpose, low-				
temperature flux for use in silver brazing. Use with most ferrous and non-ferrous metals, not					
recommended on	aluminium, magnesium, and titanium.				
Chemical Formu	<u>la</u> : N/A				
Product Use:	Exclusively used in torch brazing				

User Responsibility: The information in this Material Data Safety Sheet cannot be expected to cover all potential, individual workplace conditions. The user of the product has a responsibility to provide and maintain a safe workplace. All areas of operation should be examined to determine if, or where, safeguards-in addition to those described in this Material Data Safety Sheet-are required. Health hazards and safety information contained within this document should be passed on to your customers and/or employees as the case may be.

#### **Section 2: Hazardous Ingredients**

Mixture of: Potassium tetraborate, potassium fluorosilicate, boric acid and borax

Note: The in

The individual chemical substances that are identified above are known to react with each other during manufacture of the individual flux products to form new more complex compounds, the nature of which have not been established. The Health and Safety information, EC Material Classification etc. for the products have been determined by means of physical testing, see Section 11 Toxicological Data.

CAS Numbers For Chemical Substances Identified above.

Substance CAS Number.

 Boric acid
 10043-35-3

 Potassium borate
 12712-38-8

 Potassium fluoride
 7789-23-3

 Water
 7732-18-5

Section 3: Hazard Identification

The products identified above are classified as harmful as supplied. The main hazards with these products occur when used as brazing fluxes. On heating the flux will fume slightly, and

with overheating the fumes will increase. The fumes produced may include hydrogen fluoride and boron trifluoride, which can cause irritation of the nasal passages, eyes and hroat. To minimise evolution of flux fume always use the products with brazing filler metals that have liquidus temperatures 50°C less than the maximum working temperature shown within the table in Section 1. Severe long term exposure to flux fume may result in fluorosis. In acute cases there is a danger of ulmonary oedema although his occurrence could also result from inhalation of razing filler metal fume or torch gases. Inhalation of flux fume will be irritating to the nose and throat and will cause smarting of the eyes. Fluxes are harmful by ingestion, and will be irritating to the eyes. Skin contact may cause moderate irritation. Tests carried out on fluxes indicate that they are moderately irritating to the skin and if the skin is broken immediate irritation will occur on contact.

#### **Section 4: First Aid Treatment**

Inhalation Remove from source of exposure and allow to rest in fresh air.

In acute cases apply artificial respiration and if necessary

summon medical aid.

Ingestion Rinse mouth with water & give patient water or milk mixed

with calcium carbonate (chalk) to drink. Do not induce vomiting.

Summon medical aid.

Eyes Irrigate with water or isotonic saline for up to 20 minutes. Seek

medical attention if there is any hint of eye damage.

Skin Remove any contaminated clothing and wash skin with soap and

water. Seek medical attention if sores develop. Launder clothing

before re-use.

#### **Section 5:** Fire Fighting Measures

Non flammable. Use full protection with breathing apparatus if involved in a fire as harmful fumes may be evolved. Use any extinguishing medium appropriate for surrounding fire.

#### **Section 6: Accidental Release Measures**

Powder Carefully sweep up and collect in a suitable container for re-use or

disposal.

#### **Section 7: Handling & Storage**

Handling Use only under conditions of good local ventilation or efficient extraction

systems and do not inhale fumes or dust evolved during use. Avoid contact with skin and eyes. Do not eat, drink, smoke or apply cosmetics whilst using these materials. Keep away from food, drink and animal feed stuffs and out

of reach of children. Observe good industrial hygiene practices.

Storage Store in a cool, dry place. Keep container closed when not in use. Do not

freeze paste.

# **Section 8: Exposure Controls**

United Kingdom Workplace Exposure limits (EH40/2005) For The Fumes Evolved During Brazing.

Element	Long Term	Short Term (15 minutes)	
	(8 hour)		
Fluoride (inorganic as F)	2.5 mg/m3		
Hydrogen fluoride (as F)	1.5  mg/m3	2.5  mg / m3	
* Time Weighted Average			

#### PERSONAL PROTECTION

Avoid exposure to fume with good ventilation or local extraction. If risk of inhalation exists, personal respiratory protection should be worn. Safety glasses should be worn as well as gloves if required. Wash hands after using these products. The use of protective clothing is recommended. The use of barrier creams may help prevent skin irritation.

# **Section 9:** Physical & Chemical Properties

Appearance White/Blue powder or Paste

Odour No detectable odour

pH 8

Boiling/Melting Point 550-800

Flash Point Not applicable
Flammability Not flammable
Oxidising properties Not oxidising

Solubility Water-low solubility, no specific data.

# **Section 10:** Stability & Reactivity

Containers of powder left open may absorb moisture and become lumpy. Pastes are water based and, whilst stable, will lose water via evaporation if left open. Avoid contact with acids.

# **Section 11: Toxicological Information**

Toxicological data for these preparations: LD50 (oral-rat) >200mg/Kg Classified as moderately irritating, according to Draize skin test.

#### **Section 12: Ecological Information**

Likely to be harmful to all species of animal life. As far as is known no other threat is posed to the environment.

# **Section 13: Disposal Considerations**

Disposal according to local and national regulations. Registered waste contractors should be aware of the composition and data given in Section 2. of this document.

# **Section 14: Transport Information**

Not classified as hazardous for land, sea or air transport. No UN No's have been issued for fluxes.

# **Section 15:** Regulatory Information

EC Supply	Harmful	
Risk Phrases	R20/22 R36/38	Harmful by inhalation and if swallowed Irritating to eyes and skin
Safety Phrases	S20/21 S22	When using do not eat, drink or smoke  Do not breath dust
	S23	Do not breath fumes In case of eye contact, rinse immediately with water and seek medical advice
	S26	In case of accident or if you feel unwell seek medical advice immediately (show the label where possible)
	S51	Use only in well ventilated areas

<u>Section 16:</u> Other Information and strong oxidising agents. No other adverse reactions are known.