



Material Safety Data Sheet
 May be used to comply with
 OSHA's Hazard Communication Standard,
 29 CFR 1910.1200. Standard must be
 consulted for specific requirements.

U.S. Department of Labor
 Occupational Safety and Health Administration
 (Non-Mandatory Form)
 Form approved
 OMB No. 1218-0072

IDENTITY (As Used on Label and List)
 P101, P107, P110 BRAZING PASTE FLUX BINDER

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name KROHN INDUSTRIES, INC.	Emergency Telephone Number (201) 933-9696
Address (Number, Street, City, State, and ZIP Code) 303 VETERANS BOULEVARD	Telephone Number for Information (201) 933-9696
CARLSTADT, NEW JERSEY 07072	Date Prepared AUGUST 20, 2014 (REVISION DATE)
	Signature of Preparer (optional)

Section II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
BORIC ACID CAS#10043-35-3		N.A.		
POTASSIUM TETRABORATE CAS#1332-77-0		2.5mg/m3		
POTASSIUM FLUORIDE CAS#7789-23-3		N.A.		

Section III — Physical/Chemical Characteristics

Boiling Point	N.A.	Specify Gravity (H ₂ O = 1)	N.A.
Vapor Pressure (mm Hg.)	N.A.	Melting Point	N.A.
Vapor Density (AIR = 1)	N.A.	Evaporation Rate (Butyl Acetate = 1)	N.A.
Solubility in Water	Nil		
Appearance and Odor	Dark grey, black or brown paste when mixed with alloy.No odor.		

Section IV — Fire and Explosion Hazard Data

Flash Point (Method Used)	N/A	Flammable Limits	N/A	LEL	UEL
Extinguishing Media	Dry chemical, CO ₂ foam, waterfog, sand, earth.				
Special Fire Fighting Procedures	Water spray is an unsuitable extinguishing agent. Fire fighters should use self-contained breathing apparatus to protect against smoke inhalation				
Unusual Fire and Explosion Hazards	None				

Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable	X	Stable at room temperature.

Incompatibility (Materials to Avoid) Flame, heat (250°F Max), and strong oxidizing agents.

Hazardous Decomposition or Byproducts Fluoride fumes or gas, BF₃ gas on heating during brazing. Also, B₂O₃ (See Section V), Carbon Monoxide and Carbon Dioxide.

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	

Section VI — Health Hazard Data

Route(s) of Entry: Inhalation? Y Skin? Y Ingestion? Y

Health Hazards (Acute and Chronic) Eye irritation, or eye injury upon prolonged contact. Skin irritation particularly on abraded skin. Prolonged exposure may cause dermatitis. Some components of this product are potentially toxic if ingested, and may cause: nausea, vomiting, diarrhea, abdominal pain, gastrointestinal irritation, convulsions, tachycardia, cramps, and central nervous system depression. Acute exposure: Irritation to the nose, throat, and respiratory tract; cough, nose bleeds, nausea, vomiting, chest tightness, chills, fever, tearing, pneumonitis, and pulmonary edema. Chronic exposure: Abdominal pain and cramps, liver and kidney damage, impaired pulmonary function, and fluorosis (a disease characterized by mottled teeth, osteosclerosis, and pain and loss of mobility in joints).

Emergency and First Aid Procedures Eye & Skin- Remove contaminated clothing. Flush affected areas with water for at least fifteen minutes. Seek medical assistance if necessary.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled Avoid contact with skin or eyes. Avoid high temperature. Wear rubber gloves during spill clean up.

Waste Disposal Method Consider possible reclaim value. Scrap alloy can be disposed of through a licensed waste disposal company, in accordance with Federal, State and Local regulations. The disposal of collected fumes (see section VIII) from the exhaust ventilation system must be considered also.

Other Precautions Ingestion-If subject is conscious, induce vomiting. Seek immediate medical assistance. Never attempt to give anything by mouth to an unconscious or convulsive person. Inhalation- Remove subject from area administer oxygen, seek medical attention.

Section VIII — Control Measures

Respiratory Protection (Specify, Type)

Ventilation (For fumes & gases)	Local Exhaust Air flow to produce velocity of <u>100 linear ft./min in brazing zone.</u>	Special Natural (min): <u>10,000 cu.ft./brazer</u>
	Mechanical (General) <u>2,000 cu.ft./min./brazer (see footnote).</u>	Other <u>16ft. ceiling no obstructions.</u>

Protective Gloves Leather welding gloves. Eye Protection Plastic frame safety spectacles with side shields-filter lenses shade #3 or #4.

Other Protective Clothing or Equipment Normal clothing for torch brazing. (Avoid flammable fabrics.)

Work/Hygienic Practices