



**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)**  
 GROUP IV SOLDERS (see pages 3 & 4) 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**

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

**Section II - Hazardous Ingredients/Identity Information**

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
SILVER (Ag) CAS #7440-22-4		0.1mg/m <sup>3</sup>		
COPPER (Cu) CAS #7440-50-8		0.2mg/m <sup>3</sup> (as fume)		
ZINC (Zn) CAS #7440-66-6		5mg/m <sup>3</sup> (as zinc oxide fume)		

**Section III - Physical/Chemical Characteristics**

<b>Boiling Point</b>	N/A	<b>Specify Gravity (H<sub>2</sub>O = 1)</b>	N/A
<b>Vapor Pressure (mm Hg.)</b>	N/A	<b>Melting Point</b>	N/A
<b>Vapor Density (AIR = 1)</b>	N/A	<b>Evaporation Rate (Butyl Acetate = 1)</b>	N/A
<b>Solubility in Water</b> N/A			
<b>Appearance and Odor</b> METALLIC - ROD, STRIP, WIRE OR POWDER. ODORLESS.			

**Section IV - Fire and Explosion Hazard Data**

<b>Flash Point (Method Used)</b> N/A	<b>Flammable Limits</b> N/A	<b>LEL</b> N/A	<b>UEL</b> N/A
<b>Extinguishing Media</b> N/A			
<b>Special Fire Fighting Procedures</b> N/A			
<b>Unusual Fire and Explosion Hazards</b> N/A			

**Section V — Reactivity Data**

Stability	Unstable		Conditions to Avoid
	Stable	X	STABLE AT ROOM TEMPERATURE.

Incompatibility (Materials to Avoid)  
NONE KNOWN.

Hazardous Decomposition or Byproducts  
CU FUMES, ZN OXIDE, AG METAL MAY BE GENERATED DURING BRAZING. AVOID OVERHEATING.

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	

**Section VI — Health Hazard Data**

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

Health Hazards (Acute and Chronic)  
MAJOR CONCERNS OF A Ag, Zn, Cu SYSTEM THROUGH FUME AND DUST INHALATION ARE "BRASS CHILLS", IRRITATION OF THE RESPIRATORY TRACT, NAUSA, AND IN SOME CASES MAY CAUSE DISCOLORATION OF THE SKIN AND HAIR.

Carcinogenicity:                      NTP?    NO                      IARC Monographs?    NO                      OSHA Regulated?    NO

Signs and Symptoms of Exposure    FEVER, CHILLS, IRRITATION OF THE RESPIRATORY TRACT, NAUSA AND IN SOME CASES MAY CAUSE DISCOLORATION OF THE SKIN AND HAIR.

Medical Conditions  
Generally Aggravated by Exposure    RESPIRATORY CONDITIONS.

Emergency and First Aid Procedures    IF DUST OR FUMES GETS INTO EYES, IRRIGATE IMMEDIATELY. IF A PERSON BREATHEES IN LARGE AMOUNTS OF DUSTS OR FUMES, MOVE THE EXPOSED PERSON TO FRESH AIR AT ONCE AND PERFORM ARTIFICIAL RESPIRATION. IF SWALLOWED, GET MEDICAL ATTENTION IMMEDIATELY. GIVE LARGE QUANTITIES OF WATER AND INDUCE VOMITING. DO NOT MAKE AN UNCONSCIOUS PERSON VOMIT.

**Section VII — Precautions for Safe Handling and Use**

Steps to Be Taken in Case Material is Released or Spilled  
NO PROBLEM IN PICKING UP WIRE, ROD, OR STRIP FORMS OF THE ALLOY, FOR USE, RECLAIM OR SCRAP.  
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.

Precautions to Be Taken in Handling and Storing  
NONE KNOWN.

Other Precautions  
NONE KNOWN.

**Section VIII — Control Measures**

Respiratory Protection (Specify Type)    IN CONFINED SPACE USE AN AIRLINE RESPIRATOR OR HOSE MASK. NIOSH, U.S. BUREAU OF MINES APPROVED HOSE TYPE C OR SELF-CONTAINED AIR RESPIRATOR.

Ventilation FOR FUMES & GASES	Local Exhaust    AIR FLOW TO PRODUCE VELOCITY OF 100 LINEAR FT/MIN IN BRAZING ZONE	Special    SEE FOOTNOTE
	Mechanical (General)    2000 CU FT/MIN/BRAZER	Other    SEE FOOTNOTE

Protective Gloves    LEATHER WELDING GLOVES                      Eye Protection    PLASTIC FRAME SAFETY GLASSES WITH SIDE SHIELDS FILTER LENSES (SHADE 3 & 4)

Other Protective Clothing or Equipment  
NORMAL CLOTHING FOR TORCH BRAZING.

Work Hygiene Practices  
LAUNDER SOILED CLOTHING BEFORE REUSE. WASH THOROUGHLY WITH SOAP AND WATER AFTER USE.

(FR Doc. 85-28201 Filed 11-25-85; 8:45 am) BILLING CODE 4510-26-C  
FOOTNOTE— REFER TO "OSHA STANDARD 29 CFR 1910 FROM THE U.S. GOVERNMENT PRINTING OFFICE, WASHINGTON, D.C. 20402 AND ANSI STANDAR 249.1 - SAFETY IN THE WELDING & CUTTING", PUBLISHED BY THE AMERICAN WELDING SOCIETY, P.O. BOX 351040, MIAMI, FL 33135