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# MATERIAL SAFETY DATA SHEET

ISSUED DATE 11-15-85 REVISED DATE 9-30-09

## I. IDENTIFICATION

MANUFACTURER'S NAME		Mi-Tech Metals, Inc.		EMERGENCY TELEPHONE NO.		(317) 549-4290	
ADDRESS		4701 Massachusetts Avenue - Indianapolis, IN 46218					
CHEMICAL NAME AND SYNONYMS				TRADE NAME AND SYNONYMS			
Tungsten, Copper				CW 80			
C.A.S. NO.		T.S.C.A. NO.		FORMULA			
NIF		NIF		W-Cu			
DEPARTMENT OF		HAZARD CLASSIFICATION		U.N. NO.			
TRANSPORTATION		NIF		NIF			
		SHIPPING NAME					
		CW80 Copper Tungsten					

## II. INGREDIENTS

MATERIAL	%	TLV (Units)	C.A.S. NO.	NFPA RATING  4 = EXTREME 3 = HIGH 2 = MODERATE 1 = SLIGHT 0 = INSIGNIFICANT
Tungsten	80	5 MG/M <sup>3</sup>	7440-33-7	
Copper	20	1 MG/M <sup>3</sup>	7440-50-8	

REPORT ALL INGREDIENTS ≥3%; IF HAZARDOUS, REPORT ≥1%; SPECIAL HAZARDOUS SUBSTANCES ≥0.01%

## III. PHYSICAL DATA

BOILING POINT, 760mm Hg 101.325 kPa	Tungsten - 5660°C Copper - 2567°C	FREEZING POINT	N/A
SPECIFIC GRAVITY (H <sub>2</sub> O=1)	15.56 g/cc	VAPOR PRESSURE AT 20°C	N/A
VAPOR DENSITY (AIR=1)	N/A	SOLUBILITY IN WATER, % BY WT.	N/A
APPEARANCE AND ODOR	Copper Colored – No odor		

## IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used)	NIF	FLAMMABLE LIMITS LEL	NIF	UEL	NIF
EXTINGUISHING MEDIA	NIF (No Information Found)				
SPECIAL FIRE FIGHTING PROCEDURES	NIF				
UNUSUAL FIRE AND EXPLOSION HAZARDS	Will oxidize above 1300°F				

## V. REACTIVITY DATA

STABILITY		CONDITIONS TO AVOID	Nitric Acid will cause oxidation of the Copper and form Nitrogen Oxide. Avoid other strong acids.
UNSTABLE	STABLE		
	X		
INCOMPATIBILITY (Materials to Avoid)			

HAZARDOUS DECOMPOSITION PRODUCTS	
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### VI. HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE	OSHA Tungsten 5 MG/M <sup>3</sup> Copper 1 MG/M <sup>3</sup>	ACGIH Tungsten 5 MG/M <sup>3</sup> Copper 1 MG/M <sup>3</sup>
ROUTES OF EXPOSURE (Check Those Which Apply)	EYE CONTACT No SKIN CONTACT No	INHALATION No INGESTION No SKIN ABSORPTION No
SIGNS AND SYMPTOMS OF OVEREXPOSURE	NIF (No Information Found)	
EFFECTS OF OVEREXPOSURE		
ACCUTE	NIF	
CHRONIC	NIF	
HAS IOSHA FOUND THIS MATERIAL TO BE A POTENTIAL CARCINOGEN?	YES	NO X
EMERGENCY FIRST AID PROCEDURES		

### VII. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELATED OR SPILLED	
WASTE DISPOSAL METHOD	Re-cycle all scrap and machine turnings.
	DISPOSER MUCH COMPLY WITH FEDERAL, STATE AND LOCAL DISPOSAL OR DISCHARGE LAWS.

### VIII. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify Type)	Use NIOSHA/MSHA approved type respirator for dusting conditions		
VENTILATION	LOCAL EXHAUST	Recommended	SPECIAL NIF
	MECHANICAL (General)	NIF	OTHER NIF
PROTECTIVE GLOVES	None	EYE PROTECTION	Use safety eyewear
OTHER PROTECTIVE EQUIPMENT	None		

### IX. SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING	Store in cool, dry, well ventilated area. Separate from acids and alkalis.
OTHER PRECAUTIONS	

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