



HOGEN INDUSTRIES, INC.
OF INDIANA
4655 Massachusetts Avenue
Indianapolis, IN 46218
800-912-4123
Fax: 317-591-5071

MATERIAL SAFETY DATA SHEET

ISSUED DATE 11-19-85 REVISED DATE 9-30-09

I. IDENTIFICATION

MANUFACTURER'S NAME		Hogen Industries, Inc.		EMERGENCY TELEPHONE NO.		(317) 591-5070	
ADDRESS		4655 Massachusetts Avenue - Indianapolis, IN 46218					
CHEMICAL NAME AND SYNONYMS		Tungsten, Carbide, Copper		TRADE NAME AND SYNONYMS		H10TC	
C.A.S. NO.	NIF	T.S.C.A. NO.	NIF	FORMULA	WC-Cu		
DEPARTMENT OF TRANSPORTATION	HAZARD CLASSIFICATION	NIF		U.N. NO.	NIF		
	SHIPPING NAME	H10TC Tungsten Carbide -Copper					

II. INGREDIENTS

MATERIAL	%	TLV (Units)	C.A.S. NO.	NFPA RATING 4 = EXTREME 3 = HIGH 2 = MODERATE 1 = SLIGHT 0 = INSIGNIFICANT
Tungsten Carbide	56	5 MG/M ³	11130-73-7	
Copper	44	1.0 MG/M ³	7440-50-8	

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

III. PHYSICAL DATA

BOILING POINT, 760mm Hg 101.325 kPa	WC- 6000°C Cu - 2567°C	FREEZING POINT	N/A
SPECIFIC GRAVITY (H ₂ O=1)	11.67 g/cc	VAPOR PRESSURE AT 20°C	N/A
VAPOR DENSITY (AIR=1)	N/A	SOLUBILITY IN WATER, % BY WT.	Insoluble
APPEARANCE AND ODOR	Metallic Copper Colored - No odor		

IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used)	N/A	FLAMMABLE LIMITS LEL	NIF	UEL	NIF
EXTINGUISHING MEDIA	Class D				
SPECIAL FIRE FIGHTING PROCEDURES					
UNUSUAL FIRE AND EXPLOSION HAZARDS	Gives off CO and/or CO ₂ when burning in Oxygen containing atmosphere. Will oxidize above 1300°F.				

V. REACTIVITY DATA

STABILITY			
UNSTABLE	STABLE	CONDITIONS TO AVOID	Strong acids
	X		
INCOMPATIBILITY (Materials to Avoid)			
HAZARDOUS DECOMPOSITION PRODUCTS		CO and/or CO ₂ - Nitrogen Oxide	

VI. HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE	OSHA	Tungsten Carbide 5 MG/M ³ Copper 1.0 MG/M ³	ACGIH	Tungsten Carbide 5 MG/M ³ Copper 1.0 MG/M ³
ROUTES OF EXPOSURE (Check Those Which Apply)	EYE CONTACT	No	INHALATION	No
	SKIN CONTACT	No	INGESTION	No
SIGN 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	

DISCLAIMER OF LIABILITY

As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for any use of the material. Information contained herein is believed to be true and accurate but all statements or suggestions are made without any warranty, express or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof.

Form # 137

Rev. B
03/01/06
Page 2 of 2