



HOGEN INDUSTRIES, INC.

OF INDIANA

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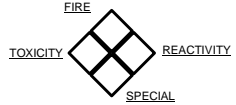
MATERIAL SAFETY DATA SHEET

ISSUED DATE 11-22-85 REVISED DATE 9-30-09

I. IDENTIFICATION

MANUFACTURER'S NAME		Hogen Industries		EMERGENCY TELEPHONE NO.		(317) 591-5070	
ADDRESS		4655 Massachusetts Avenue - Indianapolis, IN 46218					
CHEMICAL NAME AND SYNONYMS		Tungsten, Silver		TRADE NAME AND SYNONYMS		H35S	
C.A.S. NO.	NIF	T.S.C.A. NO.	NIF	FORMULA	W-Ag		
DEPARTMENT OF TRANSPORTATIO N	HAZARD CLASSIFICATION	NIF		U.N. NO.	NIF		
	SHIPPING NAME	H35S Silver Tungsten					

II. INGREDIENTS

MATERIAL	%	TLV (Units)	C.A.S. NO.	NFPA RATING  4 = EXTREME 3 = HIGH 2 = MODERAGTE 1 = SLIGHT 0 = INSIGNIFICANT
Tungsten	65	5 MG/M ³	7440-33-7	
Silver	35	0.1 MG/M ³	7440-22-4	

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

III. PHYSICAL DATA

BOILING POINT, 760mm Hg 101.325 kPa	Tungsten - 5660°C Silver - 1955°C	FREEZING POINT	N/A
SPECIFIC GRAVITY (H ₂ O=1)	14.5 g/cc	VAPOR PRESSURE AT 20°C	N/A
VAPOR DENSITY (AIR=1)	N/A	SOLUBILITY IN WATER, % BY WT.	Insoluble
APPEARANCE AND ODOR	Silver - No odor		

IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method Used)	Non-combustible	FLAMMABLE LIMITS LEL	N/A	UEL	N/A
EXTINGUISHING MEDIA					
SPECIAL FIRE FIGHTING PROCEDURES					
UNUSUAL FIRE AND EXPLOSION HAZARDS	Will oxidize at or about 1300°F				

V. REACTIVITY DATA

STABILITY			
UNSTABLE	STABLE	CONDITIONS TO AVOID	Keep away from strong acids.
	X		
INCOMPATIBILITY (Materials to Avoid)			
HAZARDOUS DECOMPOSITION PRODUCTS			

VI. HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE	OSHA	Tungsten 5 MG/M ³ Silver 0.1 MG/M ³	ACGIH	Tungsten 5 MG/M ³ Silver 0.1 MG/M ³
ROUTES OF EXPOSURE (Check Those Which Apply)	EYE CONTACT	No	INHALATION	No
	SKIN CONTACT	X	INGESTION	No
SIGNS AND SYMPTOMS OF OVEREXPOSURE				
Silver can cause argyria or permanent pigmentation of the skin, from repeated exposures over a considerable period of time where alloy is in the form of finely divided dust particles.				
EFFECTS OF OVEREXPOSURE				
ACCUTE				
CHRONIC NIF (No information found)				
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

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