JM SCIEN

40 S. Linden Street, Duquesne, PA 15110 USA

T: +1-412-469-8466

F; +1-412-469-8511

angstromsciences.com

MATERIAL SAFETY DATA SHEET COMPLIES WITH 29 CFR 1910.1200. **OSHA HAZARD COMMUNICATION RULE**

DATE OF LAST REVISION: 06-05-96

CHEMICAL IDENTITY

LABEL IDE	NTITY		NICKEL-CHROMIUM ALLOY			
CHEMICAL	NAME/SYN	NONYMS	NICKEL BASED ALLOY			
FORMULA			NiCr			
CAS REGIS	STRY NUM	BER	Ni: 7440-02-02; Cr: 7440-47-3			
HAZARDO	JS INGRED	DIENTS:				
%:	80-90	OSHA(PEL):	1mg/m3	ACGIH(TLV):: 1.0mg/m3		
%:	10-20	OSHA(PEL):	1mg/m3	ACGIH(TLV): 0.5mg/m3		
PHYSICAL AND CHEMICAL PROPERTIES						

COLOR, FORM AND ODOR **BOILING POINT** DENSITY (gm/cc) VAPOR PRESSURE @ 20° % VOLATILE BY VOLUME (%) **REACTION WITH WATER** EVAPORATION RATE (H20=1) SOLUBILITY IN WATER MELTING POINT SPECIFIC GRAVITY (H2O=1)

Silver to gray, odorless NA NA NA NA NA NA Insoluble 1500 - 1550°C 8.54 - 8.72°C

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT AUTOIGNITION TEMPERATURE (°C) FLAMMABILITY EXTINGUISHING MEDIA SPECIAL FIRE FIGHTING PROCEDURES **UNUSUAL FIRE & EXPLOSION HAZARDS**

NA

NA

% by volume

Class D extinguisher, dry chemicals Wear a self-contained breathing apparatus Powder, fines or dust are flammable and may ignite spontaneously in air. Powder ignites & is spontaneously explosive in the atmosphere at CO2.



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HEALTH HAZARD INFORMATION

TOXICITY DATA

No Data

HMIS RATING:

HEALTH: na FLAMMABILITY: na REACTIVITY: na

ROUTES OF ENTRY

INHALATION:YesSKIN:YesINGESTION:Yes

res Yes (broken) Yes

PERSONAL PROTECTION: na

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: allergies and impaired pulmonary functions.

EFFECTS OF OVEREXPOSURE (acute and chronic):

INHALATION: chronic respiratory ailments.

DERMAL/EYE: dermatitis and conjunctivitis

INGESTION: poison

CARCINOGENICITY: experimental carcinogen, neoplastigen, tumorigen and teratogen. Symptoms of overexposure: cough, shortness of breath, dermatitis, chills, bronchitis, irritation and fever, and can cause pulmonary asthma.

CARCINOGENICITY: Yes NTP: No IARC MONOGRAPHS: No OSHA REGULATE: No

EMERGENCY FIRST AID PROCEDURES: INGESTION: Seek medical attention INHALATION: Seek medical attention SKIN CONTACT: Wash affected area with soap and water EYE CONTACT: Flush eyes with copious amounts of water

REACTIVITY DATA

STABILITY	Stable
CONDITIONS CONTRIBUTING TO UNSTABILITY	None
INCOMPATIBILITY (MATERIALS TO AVOID)	Reacts violently with F2, ammonia, ammonium nitrate, hydrazine, H2+ dioxane, performic acid, P, Se, S, (Ti+KCIO3). Under certain conditions exposure to carbon monoxide may produce nickel carbonyl, a highly toxic gas.
HAZARDOUS DECOMPOSITION PRODUCTS	None
HAZARDOUD POLYMERZATION	Will Not Occur
CONDITIONS TO AVOID	None





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SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Pick up powder or dust spills with methods such as vacuuming or wet mopping.

WASTE DISPOSAL METHOD:

Metal may recycled. If disposing of please consult federal, state and local regulations for proper disposal.

SPECIAL PROTECTIVE INFORMATION

RESPIRATORY PROTECTION

LOCAL EXHAUST MECHANICAL (general) OTHER PROTECTIVE GLOVES EYE PROTECTION with NIOSH approved respirators according to CFR 1910.134 in machining processes producing dust or fumes Recommended NA None recommended Recommended Use safety glasses/goggles when working

processes that generate dust, powder, fumes. Wash hands thoroughly after handling metal alloys. Maintain a clean dust-free

OTHER PROTECTIVE EQUIPMENT

environment.

SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING/STORAGE: Avoid dusty conditions, store away from oxidizing agents, mineral acids, and sources of ignition or heat.

PRECAUTIONARY LABELING OTHER PRECAUTIONS	NONE NONE	
TRANSPORTATION REQUIREMENTS	DOT CLASS: UN NUMBER: IMCO CLASS: OTHER:	Not Classified NC NC SPC, Corrosive

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