



TEMCO

MATERIAL SAFETY DATA SHEET

HAZARD IDENTITY

DATE 12/18/09
 REV 9
 MDS NUMBER 647
 COMPILED BY L. Meeder
 APPROVED BY Co. Safety Director

HEALTH 1	FLAMMABILITY 0
CONTACT 1	REACTIVITY 0

PRODUCT IDENTIFICATION

C64700 (SILICON BRONZE)

SECTION I

MANUFACTURER'S NAME: The Electric Materials Company
 STREET ADDRESS: 50 South Washington Street
 CITY, STATE, & ZIP: North East, PA 16428
 EMERGENCY PHONE #: 814-725-9621
 INFORMATION PHONE #: 814-725-9621

SECTION II - HAZARDOUS INGREDIENTS

Chemical Name	Ingredients		Percent Weight	PEL Occupational Exposure Limits	ACGIH
	Common Name	CAS #			
* Cu	Copper	7440-50-8	97.5%	1 mg/m ³ (dust) 0.2 mg/m ³ (fume)	1 mg/m ³ 0.2 mg/m ³
* Ni	Nickel	7440-02-0	1.8%	1 mg/m ³	1 mg/m ³
Si	Silicon	7440-21-3	.45 %	10 mg/m ³ (dust) 5 mg/m ³ (resp)	10 mg/m ³ 5 mg/m ³

SECTION III - PHYSICAL DATA

MELTING RANGE: 2050 °F
 EVAPORATION RATE: N/A
 SOLUBLE IN WATER: Yes No
 VAPOR DENSITY: N/A
 PERCENT VOLATILE BY VOLUME: N/A
 SPECIFIC GRAVITY: 8.9

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLAMMIBILITY CLASSIFICATION: OSHA: N/A DOT: N/A
 FLASH POINT: N/A °F °C LEL: N/A UN: N/A

EXTINGUISHING MEDIA:

Foam Alcohol Foam CO₂ Dry Chemical Water Fog Other

UNUSUAL FIRE AND EXPLOSION HAZARDS: Never mix water or moisture with molton metal, as a steam explosion may result.

DECOMPOSITION OF PRODUCTS: Metal dust or oxides.

SPECIAL FIRE FIGHTING PROCEDURES: N/A



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SECTION V - HEALTH HAZARD DATA**EFFECTS OF OVEREXPOSURE**

Acute (Short term): Metal dust may be irritating to the skin, eyes, and upper respiratory tract. Molten fumes from the metal may cause fume fever, with flu-like symptoms, metallic taste in the mouth, and nausea. Nickel dust can cause an allergic dermatitis known as nickel itch.

Chronic (Long term): In the dust or metal fume state, it may cause an irritation of the upper respiratory tract. Chronic copper poisoning may result in Wilson's Disease, hepatic cirrhosis, brain damage, or renal disease. Nickel compounds have been found to be human carcinogens.

Medical Conditions Prone to Aggravation by Exposure: Allergies or respiratory conditions may be aggravated.

Primary Routes of Entry: Dermal Inhalation Ingestion

Emergency and First Aid Procedures: SKIN - wash with soap and water. If reddening or irritation occurs, victim should seek immediate medical attention, INHALATION - remove patient to fresh air, in all cases have individual checked by a physician.

SECTION VI - REACTIVITY DATA

STABILITY: Unstable Stable HAZARDOUS POLYMERIZATION: May Occur Will Not Occur

CONDITIONS TO AVOID: Molten metal with moisture or water can result in an explosion.

INCOMPATIBILITY (MATERIALS TO AVOID): The metal is not compatible with strong organic acids or bases.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Pick up or sweep up and store in a secure container.

WASTE DISPOSAL METHOD: Metals should be recycled.

SECTION VIII - SAFE HANDLING & USE PROCEDURES

RESPIRATORY PROTECTION: Depending on the physical state of the material (dust or fume), use respiratory protection as recommended by 29 CFR 1910.134, or applicable State regulations.

VENTILATION: Local exhaust is recommended for very dusty conditions.

PROTECTIVE GLOVES: Leather or cotton.

EYE PROTECTION: Safety Glasses or goggles.

OTHER PROTECTIVE EQUIPMENT: N/A

HYGIENIC PRACTICES: Use good personal hygiene when handling material.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING & STORING: N/A

OTHER PRECAUTIONS: Nickel has been determined to be a human carcinogen.