

** This information is given in good faith, but no warranty, expressed or implied is made.

MATERIAL SAFETY DATA SHEET

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Copper/Copper Alloys

ANODES, INGOT, BAR, WIRE

SECTION 1: IDENTIFICATION

Furnished by: Grant Manufacturing & Alloying, Inc
200-C Furnace Street
Birdsboro, Pa 19508

Effective Date: 01/01/02

Emergency Phone Number: 610-404-1380

Person to Contact: David Charest

SECTION 2: CONSTITUENTS

CHEMICAL	CAS#	%WT	CARCINOGEN	OSHA PEL	ACGIH TLV
Copper	7440-50-8	99.99	NO	0.1MG(Cu)/M3(Fume)	0.2MG/M3 (Fume)

SECTION 3: PHYSICAL DATA

Melting Point 1290-2260 degrees Fer.

Boiling Point 2595 Degrees Fer.

Vapor Pressure N/A

Vapor Density N/A

Solubility in Water nil

Apperance/Color Silver/Yellow to Reddish Color Solid With no Odor.

Specific Gravity, 68-77 F 7.49-9 (approx), depending on alloy 8.96 for Pure Cu

Odor none

% Volatile N/A

pH N/A

Evaporation Rate N/A

SECTION 4: FIRE AND EXPLOSION HAZARD DATA

Flash Point	not flammable
Flammable Limits	n/ap
Extinguishing Methods	If fire is present in presence of molten metal use Carbon Dioxide Extinguisher
Fire Fighting Equipment	If metal is present where there is fire, wear self contained breathing device .

SECTION 5: REACTIVITY DATA

Stability	stable
Conditions to Avoid	n/ap
Hazardous Polymerization	will not occur
Incompatibility	strong acids, reducing agents, halogens and oxidizers
Hazardous Decomposition	Copper Oxide Fumes may be present at temp's Higher than 1290 degrees Fer.

SECTION 6: SPILL, LEAK AND DISPOSAL PROCEDURES

Actions to take for spills	allow to solidify, collect and place in sealed drum
Disposal Method	return to supplier

SECTION 7: HEALTH HAZARD INFORMATION

Eye	dust or fumes will be an irritant clean up keeping dust to a minimum
Skin Contact	not a route of entry to the body long time exposure may result in irritation or dermititis.
Skin Absorption	not a route of entry to the body
Ingestion	May cause lung, liver and kidney damage if ingested.

Section 8: First Aid Procedures

Eyes:	Flush thoroughly with water and call a physician.
Skin:	Wash thoroughly with soap and water.
Ingestion:	Call a physician.

Inhalation:

Remove to fresh air. Call a physician.

Section 9: Special Handling Information

Ventilation:

Required to maintain TLV's

Respiratory Protection:

Fume Mask required.

Eye Protection:

Wear protective goggles.

Skin Protection:

Use protective gloves when handling material.

Other:

N/A

Section 10: Special Precautions & Additional Information

Do Not allow Water to come in contact with Molten Metal it will cause an explosive reaction with metal causing metal to fly outward.

END: