



**MATERIAL SAFETY DATA SHEET**  
 IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION HAZARD COMMUNICATION STANDARD #29 C.F.R. 1910.1200

**SECTION I – PRODUCT DESCRIPTION – Copper      COMMON NAME / GRADE - Copper Alloy C17510**

**SECTION II – HAZARDOUS INGREDIENTS**

BASE METAL, ALLOYING ELEMENTS, METALLIC COATING	% COMPOSITION BY WEIGHT (a)	CAS #	ACGIH TLV (mg/m <sup>3</sup> ) (b)
<b>BASE METAL</b>			
Copper (Cu)		7440-50-8	Remainder
<b>ALLOYING ELEMENTS</b>			
Aluminum (Al)	0.20	7429-90-5	10
Beryllium (Be)	0.2-0.6	7440-41-7	
Cobalt (Co) + Nickel (Ni)	0.3 Max	7440-48-4 7440-02-0	
Iron (Fe)	0.10 Max	7439-39-6	
Iron Oxide		1309-37-1	
Silicon (Si)	0.20	7440-21-3	10
Nickel (Ni) + Iron (Fe) + Cobalt (Co)	0.3 Max	7440-02-0/7439-39-6/7440-48-4	

(a) % of alloying materials varies with grade of material – (b1) 1965-1966 ACGIH threshold limit value  
 (b) BEI= Biological Exposure Index Exist

**SECTION III – PHYSICAL DATA**

Material is (at normal conditions) – Solid	Appearance and Odor – Metallic Pinkish Red - Odorless
Melting Point (Base Metal) – 1984.32° F (1084.62° C)	Specific Gravity –

**SECTION IV – FIRE AND EXPLOSION DATA**

Extinguishing media – Dry chemical powders, salt or inert gas – Do not use water or liquid explosion hazard could result  
 Special fire fighting procedure – If ignitable waste is generated. Special precautions and firefighting procedures should be followed ; Keep work areas free of the waste, store wet and keep away from heat and open flame – maintain humidity above 50% to prevent an electrostatic build-up. No smoking in area, use non-sparkling metal equipment.

**SECTION V – HEALTH HAZARD DATA**

Steel products in the natural state do not represent an inhalation, ingestion, or contact hazard. However, operations such as burning, welding, sawing, brazing, and grinding may release fumes and/or dust, which may present health hazard.

**SECTION VI – REACTIVITY DATA**

Stability – Stable at room temperature	Incompatibility (Material to avoid) -
Hazardous Decomposition Products	

**SECTION VII – SPILL, LEAK OR DISPOSAL PROCEDURE**

**SECTION VIII – SPECIAL PROTECTION INFORMATION**

Local exhaust ventilation should be utilized when welding, burning, grinding, or machining, NIOSH/MSHA approved dust and fume respirator should be used to avoid excessive inhalation of particulates, when exposure exceeds TLV's. Safety glasses or goggles should be utilized as required by exposure. Other protective equipment should be utilized as required by the welding standards.