



Elkhart Products Corporation

1255 Oak Street · P.O. BOX 1008 · Elkhart, Indiana 46515 · 574/264-3181 · Fax 574/264-4835

MATERIAL SAFETY DATA SHEET

COMMON NAME: COPPER and ZINC

Revised: March 2005

SECTION I: IDENTIFICATION

MANUFACTURER/AND OR DISTRIBUTED BY: ELKHART PRODUCTS CORPORATION

CHEMICAL NAME & SYNONYMS: COPPER, CAS #7440-50-8 ZINC, CAS #7440-66-6

TRADE NAME & SYNONYMS: GILDING, COMMERCIAL BRONZE, RED BRASS, LOW BRASS
CARTRIDGE BRASS, YELLOW BRASS

CHEMICAL FAMILY: COPPER and ZINC

SECTION II: INGREDIENTS AND IDENTITY INFORMATION

INGREDIENTS	PERCENT	THRESHOLD LIMIT VALUE
COPPER	65.0 TO 96.0	COPPER, DUST 1 MG/M3 FUME 0.1 MG/M3
ZINC	4.0 TO 35.0	ZINC, FUME 5 MG/M3

SECTION III: PHYSICAL DATA

ALLOY:	21000	22000	22600	23000	24000	26000	26800
METLTING:	1920	1870	1840	1810	1770	1680	1660
VAPOR PRESSURE (mm Hg):	N/A						
SOLUBILITY IN WATER:	N/A						
SPECIFIC GRAVITY (H ₂ O = 1):	N/A						

SECTION IV: FIRE AND EXPLOSION DATA

FLASHPOINT:	N/A	SPECIAL FIRE FIGHTING PROCEDURES:	N/A
EXTINGUISHING MEDIA:	N/A	UNUSUAL FIRE AND EXPLOSION HAZARDS:	N/A

IN THE SOLID FORM, THERE ARE NO FIRE OR EXPLOSION HAZARDS WITH THIS ALLOY. FINE CHIPS OR DUST MAY IGNITE AND SHOULD BE STORED IN A WELL-VENTILATED AREA. IN CASE OF FIRE, USE EXTINGUISHING AGENTS APPROPRIATE FOR THE SURROUNDINGS OR MATERIALS. DRY CHEMICALS OR SAND SHOULD BE USED TO EXTINGUISH FIRES. FIRE FIGHTERS SHOULD WEAR FULL PROTECTIVE CLOTHING, AND WHERE CONDITIONS WARRANT, NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS.

SEE SECTION VI AND VII

SECTION V: REACTIVITY DATA

STABILITY: STABLE

INCOMPATIBILITY (Material to avoid): (DUST & FUME) ACETYLENE, CHLORINE

HAZARDOUS DECOMPOSITION PRODUCTS: N/A

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

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SECTION VI: HEALTH HAZARD DATA

TLV: SEE SECTION II
PRIMARY ROUTES OF ENTRY: INHALATION OF DUST OR FUMES

UNDER NORMAL HANDLING AND USE, EXPOSURE TO THE SOLID FORM OF COPPER OR COPPER ALLOYS PRESENTS FEW HEALTH HAZARDS. THERMAL CUTTING, MELTING, MACHINING/ GRINDING MAY PRODUCE FUMES OR DUST CONTAINING THE COMPONENT ELEMENTS, AND BREATHING THESE FUMES OR DUST MAY PRESENT POTENTIALLY SIGNIFICANT HEALTH HAZARDS. THE EXPOSURE LEVELS IN SECTION II ARE RELEVANT TO FUMES AND DUST. FUMES OF COPPER MAY CAUSE METAL FUME FEVER WITH FLU-LIKE SYMPTOMS AND COPPER MAY CAUSE SKIN AND HAIR DISCOLORATION.

SECTION VII: SPILL, LEAK & DISPOSAL PROCEDURES

NO SPECIAL PRECAUTIONS ARE NECESSARY FOR SPILLS OF BULK MATERIAL. IF LARGE QUANTITIES OF DUST ARE SPILLED, REMOVE BY VACUUMING OR WET-SWEEPING TO PREVENT HEAVY CONCENTRATIONS OF AIRBORNE DUST. CLEANUP PERSONNEL SHOULD WEAR RESPIRATORS AND PROTECTIVE CLOTHING. SCRAP METAL CAN BE RECLAIMED FOR REUSE. FOLLOW FEDERAL, STATE, AND LOCAL REGULATIONS REGARDING DISPOSAL.

SECTION VIII: SPECIAL PROTECTION INFORMATION

USE GENERAL AND LOCAL EXHAUST VENTILATION TO KEEP AIRBORNE CONCENTRATIONS OF DUST AND FUMES BELOW THE TLV. WHEN REQUIRED, EMPLOYEES SHOULD WEAR MSHA- OR NIOSH- APPROVED RESPIRATORS FOR PROTECTION AGAINST AIRBORNE DUST OR FUMES. APPROVED SAFETY GLASSES AND/OR GOGGLES SHOULD BE WORN DURING ANY MACHINING, GRINDING, CUTTING, OR OTHER OPERATIONS FROM WHICH AIRBORNE PARTICLES MAYBE EMITTED. FOOD OR DRINK SHOULD NOT BE CONSUMED IN THE WORK AREA.

SECTION IX: SPECIAL PRECAUTIONS & COMMENTS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

KEEP OUT OF REACH OF CHILDREN

USE GOOD HOUSEKEEPING PRACTICES TO PREVENT ACCUMULATIONS OF DUST AND TO KEEP AIRBORNE DUST CONCENTRATIONS AT A MINIMUM.

AVOID BREATHING DUST OR FUMES.

DO NOT TAKE INTERNALLY.

STORE DUST AWAY FROM SOURCE OF IGNITION.

PRECLUDE FROM EXPOSURE TO FUME AND DUST THOSE INDIVIDUALS WITH PULMONARY AND CARDIAC DISEASES.

DISCLAIMER OF LIABILITY:

INFORMATION HEREIN IS GIVEN IN GOOD FAITH AS AUTHORITATIVE AND VALID; HOWEVER, NO WARRANTY, EXPRESSED OR IMPLIED, CAN BE MADE.