

COPPER FITTINGS

ELKHART PRODUCTS
CORPORATION



Elkhart Products Corporation

Buy American Act Product Certification

This letter certifies that all copper and copper alloy (cast) solder-joint plumbing fittings manufactured and marketed by Elkhart Products Corporation are in compliance with and meet the intent of the "Buy American Act" and the "American Recovery and Reinvestment Act", 2009.

Dennis Thompson

Staff Engineer
Elkhart Products Corporation

Subscribed and sworn to before me on
This 20th day of May, 2010

Jessica Lee Long, Notary Public
State of Michigan
County of Berrien

My commission expires on 11/19/2011



Elkhart Products Corporation

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MATERIAL SAFETY DATA SHEET

COMMON NAME: COPPER

Revised: March 2005

SECTION I: IDENTIFICATION

MANUFACTURER/AND OR DISTRIBUTED BY: ELKHART PRODUCTS CORPORATION
CHEMICAL NAME & SYNONYMS: COPPER – CU CAS #7440-50-8
UNS-C12200 – DEOXIDIZED HIGH PHOSPHORUS COPPER
TRADE NAME & SYNONYMS: WROT, WROUGHT COPPER FITTINGS
CHEMICAL FAMILY: COPPER

SECTION II: INGREDIENTS AND IDENTITY INFORMATION

<u>INGREDIENTS</u>	<u>PERCENT</u>	<u>OCCUPATIONAL EXPOSURE LIMITS</u>
COPPER	99.9	DUST 1.0 mg/m ³
PHOSPHORUS	.004/015	FUME 0.1 mg/m ³ 8 HR TWA

SECTION III: PHYSICAL DATA

PHYSICAL FORM:	SOLID	DENSITY:	N/A
BOILING TEMPERATURE:	N/A	WATER SOLUBILITY:	N/A
MELT TEMPERATURE:	1982 DEGREES F	pH:	N/A
VAPOR PRESSURE:	N/A	COLOR:	RED
EVAPORATION RATE:	N/A	ODOR:	N/A
SPECIFIC GRAVITY:	N/A		

SECTION IV: FIRE AND EXPLOSION DATA

FLASHPOINT: N/A AUTO-IGNITION TEMP: N/A
FLAMMABILITY LIMITS IN AIR: N/A LOWER: UPPER:

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

COPPER AND COPPER ALLOYS ARE STABLE UNDER NORMAL CONDITIONS OF TRANSPORT, USE AND STORAGE.

MATERIAL SAFETY DATA SHEET

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.



Elkhart Products Corporation

PRODUCT CERTIFICATION – SOLDER, BRAZED AND THREADED COPPER AND COPPER ALLOY PLUMBING FITTINGS

Elkhart Products Corporation manufactures and supplies products which meet the following specifications.

MSS	SP73	<u>Brazing Joints for Copper and Copper Alloy Pressure Fittings</u>
MSS	SP104	<u>Wrought Copper Solder Joint Pressure Fittings</u>
MSS	SP106	<u>Cast Copper Alloy Flanges and Flanged Fittings; Class 125, 150 and 300</u>
MSS	SP123	<u>Non-Ferrous Threaded and Solder-Joint Unions for use with Copper Water Tube</u>
MSS	SP109	<u>Welded Fabricated Copper Solder Joint Pressure Fittings</u>
ASME/ANSI	B16.29-2001:	<u>Wrought Copper and Wrought Copper Alloy Solder Joint Drainage Fittings – DWV</u>
ASME/ANSI	B16.18-2001:	<u>Cast Copper Alloy Solder Joint Pressure Fittings</u>
ASME/ANSI	B16.15-1994:	<u>Cast Bronze Threaded Fittings</u>
ASME/ANSI	B16.26-1988:	<u>Cast Copper Alloy Fittings for Flared Copper Tube</u>
ASME/ANSI	B16.23-2002:	<u>Cast Copper Alloy Solder Joint Drainage Fittings – DWV</u>
ASME/ANSI	B16.24-2001:	<u>Bronze Pipe Flanges and Flanged Fittings</u>

EPC's wrought copper solder joint fittings also are manufactured to comply with the material, performance and installation/joining dimensions of ASME/ANSI B16.22. These fittings are also compliant with the European Union's RoHS (Restrictions of Hazardous Substances) Directive, 2002/95/EC.

The materials used to manufacture these fittings are also in compliance with the following specifications:

Tubular Wrought Copper: ASTM B75 Alloy C 12200,	<u>Standard Specification for Seamless Copper Tube, or</u>
Products Made From Sheet: ASTM B152 Alloy C 11000,	<u>Standard Specification for Copper Sheet, Strip, Plate and Rolled Bar</u>
Cast Products: ASTM B584 Alloy C84400,	<u>Standard Specification for Copper Alloy Sand Castings for General Applications; Federal Specification WW-U-516 For Type III, Class A and B Copper Alloy Unions</u>

ELKHART PRODUCTS CORPORATION
Plumbing Division

Dana Buccicone
Director of Technology

Subscribed and sworn to before me

On this 20th day of November, 2009

Jessica Lee Long
JESSICA LEE LONG, NOTARY PUBLIC
State of Michigan – County of Berrien
My Commission Expires: 11/19/2011

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