

	PRODUCT	COPPER FITTINGS
I	CAS NO.	
ĺ	DATE	2016. 02. 22
I	REF. NO	JQ0602-004

#### 1. IDENTIFICATION

1) PRODUCT: COPPER FITTINGS (C1220 Phosphorus Deoxidized Copper Tubes)

2) USE: Water and general plumbing systems, Air conditioning and refrigeration service, Medical gas systems

3) PHYSICAL FORM: SOLID

4) METERIAL: METAL

5) MANUFACTURER: JUNGWOO METAL IND. CO., LTD

#71-30, GAMAKSAN-RO, 199BEON-GIL, NAM-MYEON, YANGJU-SI, KYUNGGI-DO, KOREA

- 2. HAZARD
- 1) HAZARD CLASSIFICATION

CERCLA INDEX: HEALTH (0) FIRE (3) REACTIVITY (0)

NO KNOW HEALTH HAZARDS FROM COPPER TUBE IN SOLID FROM. UNDER NORMAL CONDITIONS OF USE THE SOLID ARTICLE DOES NOT RELEASE MORE THAN VERY SMALL QUANTITIES OF HAZARDOUS SUBSTANCES AND DOES NOT POSE A PHYSICAL HAZARD OF HEALTH RISK OF EMPLOYEES.

2) ACUTE EFFECT OF OVEREXPOSURE: MAY CAUSE METAL FEVER, DIARRHOEA, STOMACHACHE, NAUSEA,

NEURAL DAMAGE, SHOCK, VOMITTING, DERMATITIS

3) CHRONIC EFFECT OF OVEREXPOSURE: MAY CAUSE HAIRLOSS, HEADACHE,

LUNG DISEASE INCLUDING SYMPTOMS FOR ACUTE EFFECT ABOVE

- 4) PRIMARY ENTRY ROUTE: INHALATION, INGESTION
- 5) PREVENTION PHRASE FOR ACTION
  - SIGNAL WORD: DANGER
  - HAZARD, DANGER PHRASE

H335 MAY AFFECT RESPIRATORY SYSTEM

H372 MAY CAUSE DAMAGES TO  $\cdots$ . IF EXPOSED LONGER THAN THE RECOMMENDED LIMITS.

H400 SUBSTANTIALLY TOXIC TO AQUATIC ORGANISMS

H410 SUBSTANTIALLY TOXIC TO AQUATIC ORGANISMS AFTER THE LONG TERM EXPOSURE

- PREVENTION PHRASE FOR ACTION
- A. PREVENTION P260 DO NOT INHALE DUSTS, FUMES OR VAPORS.
  - P261 AVOID INHALATION OF DUSTS, FUMES OR VAPORS.
  - P264 WASH WITH PLENTY OF WATER AFTER HANDLING.
  - P270 DO NOT EAT, DRINK OR SMOKE WHEN HANDLING THIS PRODUCT.
  - P271 HANDLE THIS PRODUCT WHERE WORKPLACE CONDITIONS WARRANT RESPIRATORY

PROTECTION USAGE SUCH AS ADEQUATE VENTILATION EQUIPMENT.

B. ACTION P304+340 IF SYMPTOMS ARE EXPERIENCED, MOVE PERSON TO FRESH AIR &

POSE FOR EASY RESPIRATION.

P312 CONSULT WITH A PHYSICIAN IF YOU ARE CONCERNED WITH POTENTIAL OVEREXPOSURE.

P314 GET MEDICAL ADVICE OR TREATMENT IF YOU ARE CONCERNED WITH POTENTIAL OVEREXPOSURE

P391 SCOOP OR SHOVEL SPILLED MATERIAL INTO AN APPROPRIATE WASTE CONTAINER FOR RECYCLING OR DISPOSAL.

C. STORAGE P403+233 PRODUCT SHOULD BE WELL SEALED IN A PLACE WITH GOOL VENTILATION.

P405 PRODUCT SHOULD BE IN A PLACE WITH LOCK.



PRODUCT	COPPER FITTINGS
CAS NO.	
DATE	2016. 02. 22
REF. NO	JQ0602-004

3. INGREDIENTS AND IDENTITY INFORMATION

1) INGREDIENTS: COPPER CONTENT: OVER 99.90% CAS NO: 7440-50-8

PHOSPHORUS CONTENT: 0.015-0.040 CAS NO: 7723-31-0

#### 4. EMERGENCY TREATMENT

- 1) WHEN INHALING.
  - MOVE TO PLACE WITH FRESH AIR
  - TRY TO ARTIFICIAL RESPIRATION WHEN A PERSON STOPS BREATHING.
- 2) WHEN SKIN CONTACTING
  - TAKE OFF CONTAMINATED CLOTHING AND SHOES IMMEDIATELY
  - WASH OFF CONTAMINATED PART WITH SOAP OR SOFT DETERGENT (FOR 15~20 MINUTES)
- 3) WHEN EYE CONTACTING
  - WASH OFF CONTAMINATED PART IMMEDIATELY WITH MUCH WATER (AT LEAST FOR 15~20)
  - TAKE MEDICAL TREATMENT IMMEDIATELY
- 4) WHEN INTAKING
  - LETING A PERSON DRINK LOTS OF WATER IMMEDIATELY WHEN HE/SHE HAS CONSCIOUSNESS
  - REMOVE METERIAL BY VOMITTING OR CARRYING OUT LAVATION OF INTESTINES
  - DO NOT LET A PERSON VOMIT OR GIVE ANY FOOD WHEN HE/SHE HAS NO CONSCIOUSNESS
- 5) TAKE MEDICAL TREATMENT IMMEDIATELY
- 5. FIRE AND EXPLOSION
- 1) FLASHING POINT/ NATURAL IGNITION POINT: NO REFERENCE
- 2) EXPLOSION: LIQUID MATERIAL CAN BE REACTIED WITH WATER INTENSELY
- 3) DESIGNATED FIRE EXTINGUISHER: USE SODIUM CHLORIDE, POWDER EXTINGUISHER, SODA, LIME, SAND
- 6. LEAKING
- 1) PROTECTION OF PERSONNEL: DO NOT TOUCH TH EXPOSED MATERIAL AND FOLLOW SUPERVISOR'S INSTRUCTION
- 2) PROTECTION OF ENVIRONMENT: COLLECT THE EXPOSED MATERIAL AND RECYCLE IT



PRODUCT	COPPER FITTINGS
CAS NO.	
DATE	2016. 02. 22
REF. NO	JQ0602-004

#### 7. HANDLING AND STORING

- 1) STORE THE MATERIAL IN COOL, DRY AND WELL-VENTILATED AREA
- 2) STORE THE MATERIAL AWAY FROM SOURCE OF HAZARD
- 8. PROTECTION OF EXPOSURE AND PROTECTIVE GEAR
- 1) STANDARD OF EXPOSURE: TWA: 0.1 mg/m³ (FUME), 1 mg/m³ (DUST OR MIST)
- 2) VENTILATION: INSTALL THE LOCAL VENTILATION FACILITIES IN CONFORMITY TO THE STANDARD
- 3) PERSONNEL PROTECTION: SAFETY GLASSES, GLOVES, DUST-PROOF MASK
- 9. PHYSICAL DATA

1) PHYSICAL FORM: SOLID 2) ODOR: N/A

3) PH: N/A 4) WATER SOLUBILITY: N/A

5) BOILING TEMPERATURE: N/A 6) MELT TEMPERATURE: 1083℃

7) EXPLOSIVENESS: N/A 8) EVAPORATION RATE: N/A

9) GRAVITY: 8.94 10) VAPOR PRESSURE: N/A

- 10. STABLITY AND REAVTIVITY
- 1) STABLITY: COPPER AND COPPER ALLOYS ARE STABLE UNDER NORMAL CONDITION
- 2) REACTIVITY: IT MAY CAUSE INFLAMMABLE HYDROGEN WHEN REACTING TO ACID OR WATER
- 3) DO NOT SCATTER METAL DUST TO THE AIR DUST AND FUME MAY CAUSE FIRE OR EXPLOSION.
- 11. TOXICITY DATA
- 1) LD50 : N/A 2) LDL0 : N/A
- 3) CINOGENICITY: NO
- 12. ENVIRONMENTAL DATA
- 1) INDEX OF ENVIRONMENT IMPACT (0~4): N/A
- 2) HYDROSPHERE TOXICITY: N/A
- 3) RESOLVABILITY: N/A



PRODUCT	COPPER FITTINGS
CAS NO.	
DATE	2016. 02. 22
REF. NO	JQ0602-004

### 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: DISPOSE OF LOW/FEDERAL, STATE & LOCAL REGULATIONS

14. INFORMAITON FOR TRANSPORT

NONE REPORTED

- 15. REGULATIONS
- 1) THE INDUSTRIAL SAFETY AND HEALTH LAW: SUBJECT OF MSDS
- 2) THE ENVIRONMENTAL MANAGEMENT LAW; N/A
- 3) THE FIRE SERVICES ACT: N/A
- 16. THE OTHERS

GIVEN INFORMATION HEREIN IS BASED ON THE RELATED INFORMATION AND DATA, THIS CAN BE MODIFIED.

PLEASE HANDLE THE MATERIAL AFTER ESTABLISHING NEW SAFETY ACTIONS WHEN YOU USE IT IN DIFFERENT USE.

JQ0602-004 Rev.00

JUNGWOO METAL IND.. Co., LTD