

Date Issued	'06.4.17
Revision No	0

POONGSAN

MATERIAL SAFETY DATA SHEET

COPPER & BRASS SALES -- C194R STRIP (C194R)

MATERIAL SAFETY DATA SHEET

Part Number/Trade Name: C194R STRIP (C194R)

=====

General Information

=====

Item Name: 194R STRIP (C194R)

Company's Name: POONGSAN CORPORATION

Company's Street: 611 DAEJUNG-RI ONSAN-UP ULJU-KUN

Company's City: ULSAN

Company's Country: SOUTH KOREA

Company's Zip Code: 689-890

Company's Emerg Ph #: 81-52-231-9165

Company's Info Ph #: 81-52-231-9400

=====

Ingredients/Identity Information

=====

Proprietary: NO

Ingredient: COPPER (DUST & MIST)

Ingredient Sequence Number: 01

Percent: Cu 97.20-97.80

NIOSH (RTECS) Number: GL5325000

CAS Number: 7440-50-8

OSHA PEL: 0.1 MG(CU)/M3 (FUME)

ACGIH TLV: 0.2 MG/M3 (FUME)

Other Recommended Limit: 1 MG(CU)/M3 (DUST).

=====

=====

Proprietary: NO

Ingredient: FERROUS (DUST & MIST)

Ingredient Sequence Number: 01

Percent: Fe 2.10-2.60

NIOSH (RTECS) Number: GL5325000

CAS Number: 7439-89-6

OSHA PEL: None Established.

ACGIH TLV: None Established.

Other Recommended Limit: 1 MG(CU)/M3 (DUST)

=====

Proprietary: NO

Ingredient: ZINC OXIDE *96-2*
Ingredient Sequence Number: 02
Percent: 0.05- 0.20
NIOSH (RTECS) Number: ZH4810000
CAS Number: 7440-66-6
OSHA PEL: None Established.
ACGIH TLV: None Established.

=====
Proprietary: NO
Ingredient: PHOSPHORUS (YELLOW % WHITE)
Ingredient Sequence Number: 03
Percent: 0.015-0.150
NIOSH (RTECS) Number: TH3500000
CAS Number: 7723-14-0
OSHA PEL: 0.1 MG/CUM
ACGIH TLV: 0.1 MG/CUM

=====
Physical/Chemical Characteristics
=====

Appearance And Odor: SILVER / YELLOW TO RED COLOR SOLID W/NO ODOR.
Melting Point: 1,980 °F
Specific Gravity: 8.94
Solubility In Water: INSOLUBLE

=====
Fire and Explosion Hazard Data
=====

Extinguishing Media: USE SPECIAL MIXTURES OF DRY CHEMICAL/SAND.
Special Fire Fighting Proc: WEAR NIOSH/MSHA SCBA & PROTECTIVE CLOTHING.
Unusual Fire And Expl Hazrds: SOLID MASSIVE FORM ISN'T COMBUSTIBLE. MOLTEN METAL MAY REACT VIOLENTLY W/WATER.

=====
Reactivity Data
=====

Stability: YES
Cond To Avoid (Stability): WATER, HEAT, FLAMES, CHEMICAL REACTIONS.
Materials To Avoid: OXIDIZERS, ACIDS, BASES
Hazardous Decomp Products: METAL FUME.
Hazardous Poly Occur: NO

=====
Health Hazard Data
=====

Route Of Entry - Inhalation: YES
Route Of Entry - Skin: YES

Route Of Entry - Ingestion: YES

Health Haz Acute And Chronic: COPPER-INHALATION: FUMES MAY CAUSE METAL FUME FEVER. SKIN: DERMATITIS, KERATINIZATION OF THE HANDS & THE SOLES OF THE FEET. COPPER DUST & FUME CAUSES IRRITATION OF THE UPPER RESPIRATORY TRACT.

Carcinogenicity - NTP: NO

Carcinogenicity - IARC: NO

Carcinogenicity - OSHA: NO

Explanation Carcinogenicity: NONE

Signs/Symptoms Of Overexp: COPPER-FLU-LIKE SYMPTOMS, SKIN & HAIR DISCOLORATION, METALLIC TASTE IN THE MOUTH, NAUSEA.

Emergency/First Aid Proc: EYES: FLUSH W/RUNNING WATER. SKIN: VACUUM OFF EXCESS DUST. WASH W/SOAP & WATER. INHALATION: REMOVE TO FRESH AIR. OBTAIN MEDICAL ATTENTION IN ALL CASES.

=====
Precautions for Safe Handling and Use
=====

Steps If Matl Released/Spill: LARGE: REMOVE BY VACUUMING/WET SWEEPING TO PREVENT HEAVY CONCENTRATION OF AIRBORNE DUST. IF LIQUIDS CONTAINING SOLUBILIZED METAL ARE SPILLED EVACUATE AREA. ABSORB BY MEANS OF VERMICULITE, DRY SAND/SIMILAR MATERIAL. (SEE SUPP)

Waste Disposal Method: DISPOSE OF IAW/FEDERAL, STATE & LOCAL REGULATIONS.

Precautions-Handling/Storing: STORE AWAY FROM INCOMPATIBLE MATERIALS & KEEP DUST FROM IGNITION SOURCES.

=====
Control Measures
=====

Respiratory Protection: IF EXPOSURE ABOVE THE PEL/TLV, WEAR NIOSH/MSHA APPROVED RESPIRATOR.

Ventilation: LOCAL EXHAUST VENTILATION.

Protective Gloves: REQUIRED

Eye Protection: SAFETY GLASSES W/SIDE SHIELDS

Other Protective Equipment: FACE SHIELDS, SPECIALLY TINTED GLASS.

Suppl. Safety & Health Data: SPILLS CONT'D: CLEANUP PERSONNEL SHOULD WEAR RESPIRATORS & PROTECTIVE CLOTHING. VENTILATE AREA.

=====
Transportation Data
=====

=====
Disposal Data
=====

Person in charge :

Tel : 82-52-239-9383

Fax : 82-52-239-9400