

MATERIAL SAFETY DATA SHEET

signed by



Makoto Ohta
Manager of Copper Strips Group
Engineering Dept.

| | | | |
|--|-------------------------|--------------------------------------|-----------------------|
| Company Name : Hitachi Cable, LTD. | | Issue Date 2005/1/8 | Identification Number |
| Address : Tsuchiura Works 3550 Kidamari-Cho, Tsuchiura-Shi Ibaraki-Ken 300-0026 Japan | | | |
| Product Name : Copper Strip | Formula : Copper | DOT Identification Number N/A | |

I. Ingredients

| | | |
|--------------------------------------|---|--|
| Base Metal: CDA No. C15100 | Chemical Requirements Zr:0.05-0.15%; Cu+Zr:99.96%min. | Permissible Exposure Limits : (OSHA PEL) 0.2 mg/m ³ as copper fume and 1.0 mg/m ³ as copper dust & mist |
|--------------------------------------|---|--|

II. Physical Data

| |
|--|
| 1. Physical State : Solid 2. Appearance and Odor : Copper Color, Odorless 3. Melting Point / Boiling Point : 1083 ° C /2582 ° C 4. Specific Gravity (H ₂ O = 1) : 8.94 |
|--|

III. Personal Protective Equipment

| |
|---|
| 1. Respiratory Protection : NIOSH / MSHA approved dust and fume respirator should be used if OSHA PEL is exceeded. 2. Hands, Arms, Body/Eyes, Face Protection : Wear appropriate protection in handling copper tubing. |
|---|

IV. Health / Safety Information

| | |
|--------|---|
| Health | Note : Copper tubing under normal conditions does not present an inhalation, ingestion or contact health hazard. Major Exposure Hazard : N/A |
| Safety | Fire and Explosion : Copper Products in the solid state present no fire and explosion hazard. Reactivity : Stable under normal conditions |

V. Environmental

| |
|---|
| 1. Spillage and Leakage : N/A to copper products in the solid state. 2. Disposal : N/A |
|---|

While the information and recommendations of this sheet are believed to be accurate as of the present date, the issuer of this sheet makes no warranty with respect thereon and disclaims all liability from reliance thereon.

MSHA : U.S. Mine Safety and Health Administration
 OSHA : U.S. Occupational Safety and Health Administration
 PEL : Permissible Exposure Limit
 NIOSH : National Institute for occupational Safety and Health