

## MATERIAL SAFETY DATA SHEET

Version Date 1<sup>st</sup> December 2008

### Section 1: Product Identification

Trade Name : Welichi Copper Phosphorus 93/7 Brazing Alloy  
Product Classification : L-Cup 7  
Colour Marking : NA  
Product Application : Brazing Rod for Gas Welding

### Section 2: Composition/information on ingredients

These brazing rods consist of solid copper phosphorus alloy rods, manufactured in short lengths and supplied in packages. The composition of the brazing rods varies depending on the type of sizes.

#### Ingredients

| Substance           | CAS Number | Approximate Concentration |
|---------------------|------------|---------------------------|
| Copper              | 7440-50-8  | 92 ~ 94 %                 |
| Tricopper-phosphide | 12019-57-7 | 6 ~ 8. %                  |

### Section 3: Hazard Classifications

*This product consists of solid copper phosphorus brazing alloy rods. There are no recognised hazard associated directly with unused copper phosphorus brazing alloy rods. prior to welding. This product is supplied in package and may be heavy, users should handle and stored with care.*

- No dangerous goods according to current regulations.
- The principal health hazard posed by these substances is the welding fumes and gases produced during welding operation. Welding fumes produced during the welding operation may cause light general irritation of the respiratory system and may be harmful.
- Make sure the working area is always sufficiently ventilated. Ventilate the working area and/or use welding fume extractor at the welding area to remove welding fume and gas; this applies especially to confined spaces.
- To avoid irritant effects to hands and skin, suitable protective measures must be adopted prior to handling this product. If contact is likely to be minimal a barrier cream should be sufficient; for continuous handling surgical or plastic gloves should be used; industrial goggles must be worn to prevent accidental contact with eyes.
- Welding sparks may cause fires or explosion. Never conduct welding at areas adjacent to highly inflammable materials. It is important to remove all flammable materials away from the welding area so that the spatters cannot ignite them. Cover all inflammable materials with non inflammable materials if combustibles cannot be removed.
- Do not perform any welding operation where the atmosphere may contain flammable duct, gas, or liquid vapours (such as gasoline).

### Section 4: First Aid Measures

*No first aid measures should be required for unused tungsten electrode.*

*First aid measures will be required when using this product as part of the welding process. Victim(s) should be provided first aid until the medical personnel arrive; first aid will be administered in the premise or, in the event of a complete evacuation, at a safety area outside. Take copy of the label and MSDS to health professional with victim(s).*

#### Following inhalation of welding fumes and gases:

- Possible discomfort: irritation of mucous lining (nose, throat, and eyes), cough, sneezing, flow of tears.
- Take affected persons out into the fresh air.
- Seek medical attention.

#### Following contact with skin:

- If burns occur, it may be flushed with large amount of cold water for at least 20 minutes or till burning sensation ceases. Apply Calcium gluconate gel to affected skin and cover with a sterile bandage to prevent infection. Seek medical attention immediately.



**Following contact with eye:**

- If dust has got into eyes, immediately wash victim's eyes with sterile water, cover with damp dressing.
- Victim must seek medical attention immediately.

**If substance has been swallowed:**

- Ingestion is considered unlikely due to product form. However, if swallowed do not induce vomiting.
- Seek medical attention immediately.

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## Section 5: Fire-Fighting Measures

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This product is non-reactive, non-flammable, non-explosive, and essentially non-hazardous until welded. Welding arcs and sparks can ignite combustible and flammable materials. Only the packaging for this product will burn.

- In case of fire use extinguishing media appropriate to surrounding conditions.
- When the product is involved in fire, it may evolve toxic fumes, wear appropriate self-contained breathing apparatus.

**Special Fire-Fighting Instruction:**

Incipient fire fighters should wear appropriate eye protection, self-contained breathing apparatus and full protective equipments.

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## Section 6: Accidental Release Measures

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No specific measures for copper phosphorus alloy rods prior to use.  
Welding in proximity to stored or used halogenated solvents may produce toxic and irritant gases.  
Prohibit welding in areas where these solvents are used or stored.

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## Section 7: Handling and Storage

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No special precautions are required while handling and storing the tungsten electrodes.

**Workplace Practise and Hygiene Practices:**

NEVER get this product on you or in you. Wash your hands thoroughly after handling or using this product. Do not eat or drink while handling this product. Keep the product away from the foods, drinks and children. Use appropriate ventilation and other controls measures to minimize potential exposure or risk.

Ensure adequate ventilation when performing brazing operation especially in a confined space.

**Handling:**

- Tungsten electrodes are dense materials and can give rise to a handling hazard when multiple packages are lifted or handled incorrectly or with poor lifting posture.
- Users who handle this product should adopt good handling practice and should be trained to handle it safely.
- Wear approved gloves and eye/face protection equipments.
- Keep the container tightly closed when not in use

**Storage:**

- Store this product in a cool, dry location, away from sunlight, sources of intense heat or where freezing is possible.

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## Section 8: Exposure Controls and personal protection

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**Ventilation and Engineering Control:**

- Use with adequate ventilation to ensure exposure level are maintained as low as practicable.

**Occupational exposure controls:**

- Respiratory protection:  
In case of insufficient ventilation, wear suitable respiratory equipment.
- Eye protection:  
When this product is used in conjunction with brazing, wear suitable safety glasses, welding goggles or face shield with the appropriate filter lens.
- Hand protection:  
When handling this product, wear protection gloves and welding gloves that protect from sparks and flame when performing brazing operation.

- Body protection:  
Wear suitable protective clothing.



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## Section 9: Physical and Chemical Properties

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**Shape:**

- Solid in various shape

**Colour:**

- Reddish brown

**Odour:**

- Odourless

**Alteration in conditions:**

- Melting Point: 710 ~ 890 Deg C
- Boiling Point: Not define
- Flashpoint: Not Applicable
- Inflammability: Not Applicable
- Ignition temperature: Not Applicable
- Flashpoint: Not Applicable

**Density:**

- Approx 8.10 g/cm<sup>3</sup>

**Solubility:**

- Insoluble in water

**pH Value:**

- Not applicable

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## Section 10: Stability and Reactivity

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**Stability:**

- This product is considered stable under normal conditions.

**Conditions to avoid:**

- Strong acids.
- Strong bases.

**Hazardous decomposition products:**

- Copper oxides

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## Section 11 : Toxicological Information

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**No result of animal experiments with the product available.**

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## Section 12: Ecological Information

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**All work practices must be aimed to eliminating environmental contamination.**

**Product fate is highly depending on environmental conditions: pH temperature, oxidoreductive potential, mineral and organic content of the medium.**

**Acute Ecotoxicity:**

- Crustaceans, Daphnia magna, EC 50, 48 h, 22.8 mg/l

**Mobility:**

- Air
- Water/soil
- Result: low solubility and mobility
- Soil/sediments
- Result: adsorption on mineral and organic soil constituents

**Abiotic degradation:**

- Water/Soil  
Result: acid/base equilibrium as a function of Ph
- Degradation's products: fluoro-complexes (acid Ph) hydroxyl-aluminium (environmental Ph)/fluorhydric acid/fluoride
- Water/Soil  
Result: complexation/precipitation of inorganic and organic materials
- Result: not applicable (inorganic compound)

**Potential for bioaccumulation:**

- Bioconcentration: log Po/w  
Result: not applicable (ionisable inorganic compound)
- Bioconcentration: log  
Result: accumulation into vegetable leaves (Fluorides)

**Effect of chemical on aquatic life:**

- This product will cause adverse effects on aquatic life.

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## Section 13: Disposal Considerations

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**Preparing wastes for disposal:**

- Do not discharge the waste into drains or the environment; dispose to an authorised waste collection point.
- Waste disposal must be in accordance with the appropriate Federal, State, Local and National legislation.

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## Section 14: Transportation Information

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This product is not classified as hazardous transportation.

**Transportation of Dangerous Goods Regulations:**

- This product is not considered as dangerous goods.

**Hazard Class Number and Description:**

- This product is not classified as hazardous supply.

**UN Identification:**

- Not applicable.

**Risk Phrases:**

- Harmful by inhalation and if swallowed
- Irritating to eyes and skin

**Safety Phrases:**

- Wear suitable eyes, face, body and respiratory protection.
- Use only in well ventilated areas.

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## Section 15: Regulatory Information

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**Reporting Requirements:**

- The components of this product are not subject to the reporting requirements. Please clarify with the federal, state, local and national authority.

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## Section 16: Additional Information

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The information in this MSDS was obtained from sources which we believe are reliable. The conditions or method of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expenses arising out of or in any way connected with handling, storage, use or disposal of the product. This MSDS was prepared and is use only for this product. If the product is used as a component in other products, this MSDS may not be applicable. Data / info in this MSDS and others may be changed from time to time without prior notice.

