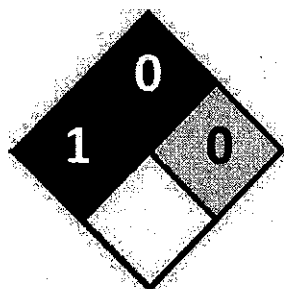


**2-B**

PRODUCT IDENTIFIER

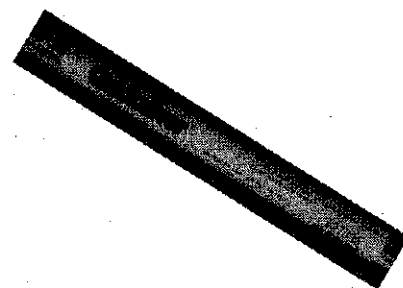
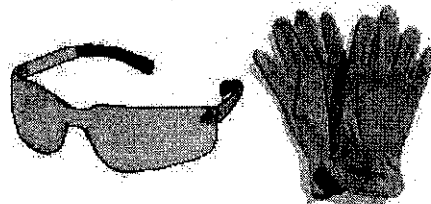
SIGNAL WORD:

**WARNING**  
ADVISO**SOLDERING  
BRAZING  
RODS****GHS Hazard Statement**

**INGESTION:** Copper poisoning can result in hemolytic anemia and kidney, liver and spleen damage.

**SKIN:** Prolonged contact may cause dermatitis. Contact with molten material may cause thermal burn.

**RESPIRATORY:** Irritating to the nose, throat, and respiratory tract. Overexposure to Copper fumes may produce metal fume fever.

**GHS Classification and Pictograms****HEALTH  
HAZARDS****S.D.S Does Not Indicate a GHS PICTOGRAM for  
HEALTH HAZARDS****PHYSICAL  
HAZARDS****S.D.S Does Not Indicate a GHS PICTOGRAM for  
PHYSICAL HAZARDS****ENVIRONMENTAL  
HAZARDS****S.D.S Does Not indicate a GHS PICTOGRAM for  
ENVIRONMENTAL HAZARDS****TARGET ORGAN  
EFFECTS****FIRE FIGHTING  
EQUIPMENT****PPE  
EPP****FIRST  
AID**

**EYES:** Check for and remove any contact lenses. Rinse immediately with plenty of water. .

**SKIN:** Remove contaminated clothing. Wash with soap and water. Get medical attention if symptoms occur.

**INGESTION:** Do NOT induce vomiting. Immediately rinse mouth and drink water a cupful of water.

**INHALATION:** Remove person from contaminated area to fresh air. Apply CPR if needed. Call physician if symptoms develop or persist.



**Safety Data Sheet**  
acc. to OSHA GHS (29 CFR 1910.1200)

Printing date 06/10/2015

Reviewed on 06/10/2015

## 1 Identification

- **Product identifier**
- **Trade name:** Phosphorus/Copper Brazing Filler Metal
- **Product size:** Variable
- **Other means of identification**  
Harris 0, Harris 0 LP, Harris 0 HP, Harris 0 AM, Harris 0 HHP, Harris 0HP, Harris 0 XHP, LCuP6, LCuP7, Phoson, PSN 4, Flash, LCuP8
- **SDS Number:** 084
- **Recommended use and restriction on use**
- **Recommended use:** Metal Brazing
- **Restrictions on use:** No further relevant information available.
- **Manufacturer/Importer/Supplier/Distributor information**
- **Manufacturer/Supplier:**  
Harris Products Group  
4501 Quality Place  
Mason, Ohio 45040 US  
513-754-2000
- **Safety Data Sheet Questions:** [salesinfo@jwharris.com](mailto:salesinfo@jwharris.com)
- **Arc Welding Safety Information:** [www.lincolnelectric.com/safety](http://www.lincolnelectric.com/safety)
- **24-Hour Emergency Response Telephone Numbers:**  
1-866-519-4752 (USA, Canada, Mexico only)
- (+) 1-760-476-3962
- **3E Company Access Code:** 333895

## 2 Hazard(s) Identification

Classified according to the criteria of the Globally Harmonized System of Classification and Labeling of Chemicals (GHS), OSHA Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Controlled Products Regulations.

- **Classification of the substance or mixture**  
The product is not classified as hazardous according to the Globally Harmonized System (GHS).
- **Additional information:**  
0 percent of the mixture consists of ingredient(s) of unknown toxicity.  
There are no other hazards not otherwise classified that have been identified.

- **Label elements**
- **GHS label elements**  
The product is not classified as hazardous according to OSHA GHS regulations within the United States.
- **Hazard pictograms** Not Regulated
- **Signal word** Not Regulated

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**Trade name: Phosphorus/Copper Brazing Filler Metal**

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Unlikely due to form of product, except for granular materials. Avoid hand, clothing, food, and drink contact with metal fume or powder which can cause ingestion of particulate during hand to mouth activities such as drinking, eating, smoking, etc. If ingested, do not induce vomiting. Contact a poison control center. Unless the poison control center advises otherwise, wash out mouth thoroughly with water. If symptoms develop, seek medical attention at once.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed**

No further relevant information available.

- **Danger**

Brazing hazards are complex and may include physical and health hazards such as but not limited to infrared radiation from flame or hot metal, physical strains, thermal burns due to hot metal or spatter and potential health effects of overexposure to brazing fume or dust. Refer to Section 11 for more information.

- **Indication of any immediate medical attention and special treatment needed** Treat symptomatically.

### 5 Fire-fighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:**

As shipped, the product will not burn. In case of fire in the surroundings: use appropriate extinguishing agent.

For metal fires: Use specific agents only.

- **For safety reasons unsuitable extinguishing agents:** For metal fires: Use specific agents only.

- **Special hazards arising from the substance or mixture**

Infrared radiation from flame or hot metal can ignite combustibles and flammable products.

- **Advice for firefighters**

- **Special fire fighting procedures:**

Use standard firefighting procedures and consider the hazards of other involved materials.

- **Protective equipment:**

Wear self-contained respiratory protective device.

Wear fully protective suit.

- **Additional information**

Read and understand American National Standard Z49.1, "Safety In Welding, Cutting and Allied Processes" and National Fire Protection Association NFPA 51B, "Standard for Fire Prevention During Welding, Cutting and Other Hot Work" before using this product.

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

If airborne dust and/or fume is present, use adequate engineering controls and, if needed, personal protection to prevent overexposure. Refer to recommendations in Section 8.

- **Environmental precautions:**

Avoid release to the environment.

Prevent further leakage or spillage if safe to do so.

- **Methods and material for containment and cleaning up:**

Clean up spills immediately, observing precautions in the personal protective equipment in Section 8.

Avoid generating dust. Prevent product from entering any drains, sewers or water sources.

Pick up mechanically.

Send for recovery or disposal in suitable receptacles.

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# Safety Data Sheet

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Trade name: Phosphorus/Copper Brazing Filler Metal

(Contd. of page 4)

REL (USA)	Long-term value: 1* 0.1** mg/m <sup>3</sup> as Cu *dusts and mists **fume
TLV (USA)	Long-term value: 1* 0.2** mg/m <sup>3</sup> *dusts and mists; **fume; as Cu
EL (Canada)	Long-term value: 1* 0.2** mg/m <sup>3</sup> *dusts and mists; **fume, as Cu
EV (Canada)	Long-term value: 0.2* 1** mg/m <sup>3</sup> as copper, *fume; **dust and mists
LMPE (Mexico)	Long-term value: 0.2* 1** mg/m <sup>3</sup> *humo (como Cu); **polvo y niebla (como Cu)

**7723-14-0 phosphorus**

REL (USA)	Long-term value: 0.1 mg/m <sup>3</sup>
LMPE (Mexico)	Short-term value: 0.3 mg/m <sup>3</sup> Long-term value: 0.1 mg/m <sup>3</sup>

• **Additional information:** The lists that were valid during the creation were used as basis.

• **Exposure controls**

• **Personal protective equipment:**

• **General protective and hygienic measures:**

The usual precautionary measures for handling chemicals should be followed.

Do not eat, drink or smoke when using the product. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Determine the composition and quantity of fumes and gases to which workers are exposed by taking an air sample from inside the welder's helmet if worn or in the worker's breathing zone. Improve ventilation if exposures are not below limits. See ANSI/AWS F1.1, F1.2, F1.3 and F1.5, available from the American Welding Society, [www.aws.org](http://www.aws.org).

Keep away from foodstuffs, beverages and feed.

• **Engineering controls:** No further relevant information available.

• **Ventilation**

Use enough ventilation, local exhaust at the the flame or heat source, or both to keep the fumes and gases from the worker's breathing zone and the general area. Train the operator to keep his head out of the fumes. Keep exposure as low as possible.

• **Breathing equipment:**

Keep your head out of fumes. Use enough ventilation and local exhaust to keep fumes and gases from your breathing zone and the general area. An approved respirator should be used unless exposure assessments are below applicable exposure limits.

• **Protection of hands:**



Thermally-protective gloves.

Suitable gloves can be recommended by the glove supplier.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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Trade name: Phosphorus/Copper Brazing Filler Metal

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- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>· <b>Viscosity:</b></li> <li>    <b>Dynamic:</b></li> <li>    <b>Kinematic:</b></li> <li>· <b>Other information</b></li> </ul> | <p>Not applicable.</p> <p>Not applicable.</p> <p>No further relevant information available.</p> |
|---|---|

## 10 Stability and reactivity

- **Reactivity** The product is non-reactive under normal conditions of use, storage and transport.
- **Chemical stability** Stable under normal temperatures and pressures.
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used and stored according to specifications.
- **Possibility of hazardous reactions**  
Reacts with strong acids and alkali.  
Reacts with strong oxidizing agents.
- **Conditions to avoid** Avoid heat or contamination.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:**  
Brazing fumes and gases cannot be classified simply. The composition and products: quantity of both are dependent upon the metal being joined, the process, procedure and filler metals and flux used. Other conditions which also influence the composition and quantity of the fumes and gases to which workers may be exposed include: coatings on the metal being joined (such as paint, plating, or galvanizing), the number of operators and the volume of the worker area, the quality and amount of ventilation, the position of the operator's head with respect to the fume and fumes from chemical fluxes used in some brazing operations.  
When the wire or rod is consumed, the fume and gas decomposition products generated are different in percent and form from the ingredients listed in Section 3. Decomposition products of normal operation include those originating from the volatilization, reaction, or oxidation of the materials shown in Section 3, plus those from the base metal and coating, etc., as noted above.

## 11 Toxicological information

- **Information on likely routes of exposure**
- **Ingestion:**  
Unlikely route of exposure.  
Health injuries from ingestion are not known or expected under normal use.
- **Inhalation:**  
Potential chronic health hazards related to the use of welding consumables are most applicable to the inhalation route of exposure.
- **Skin Contact:** Heat rays can burn skin.
- **Eye Contact:** Heat rays (infrared radiation from flame) or hot metal can injure eyes.
- **Information on toxicological effects**
- **Inhalation**  
Short-term (acute) overexposure to brazing fumes may result in discomfort such as metal fume fever, dizziness, nausea, or dryness or irritation of nose, throat, or eyes. May aggravate pre-existing respiratory problems (e.g. asthma, emphysema). Long-term (chronic) overexposure to brazing fumes can lead to siderosis (iron deposits in lung), central nervous system effects, bronchitis and other pulmonary effects.

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Trade name: Phosphorus/Copper Brazing Filler Metal

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- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**  
The generation of waste should be avoided or minimized whenever possible. When practical, recycle in an environmentally acceptable, regulatory compliant manner. Dispose of non-recyclable products in accordance with all applicable Federal, State, Provincial, and Local requirements.  
The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

- |  |                 |
|--|-----------------|
| · <b>UN-Number</b>   |                 |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   | Not Regulated   |
| · <b>UN proper shipping name</b>   |                 |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   | Not Regulated   |
| · <b>Transport hazard class(es)</b>  |                 |
| · <b>DOT, ADR, ADN, IMDG, IATA</b>   |                 |
| · <b>Class</b>   | Not Regulated   |
| · <b>Packing group</b>   |                 |
| · <b>DOT, ADR, IMDG, IATA</b>  | Not Regulated   |
| · <b>Environmental hazards:</b>  |                 |
| · <b>Marine pollutant:</b>   | No              |
| · <b>Special precautions for user</b>  | Not applicable. |
| · <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b> | Not applicable. |
| · <b>UN "Model Regulation":</b>  | -               |

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- **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **State Right to Know Listings**

- **US. New Jersey Worker and Community Right-to-Know Act**

copper

phosphorus

- **US. Massachusetts RTK - Substance List**

copper

phosphorus

- **US. Pennsylvania RTK - Hazardous Substances**

copper

phosphorus

- **US. Rhode Island RTK**

copper

phosphorus

- **Canada**

- **Canadian Controlled Products Regulations:** Not hazardous under WHMIS.

- **Canadian substance listings:**

- **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

- **Canada Non-Domestic Substances List (NDSL)**

None of the ingredients is listed.

- **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

- **Canadian Ingredient Disclosure list (limit 1%)**

All ingredients are listed.

- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

- **Date of preparation / last revision** 06/10/2015 / -

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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