



## TECHNICAL INFORMATION SHEET

### HARRIS O BRAZING FILLER METAL

#### NOMINAL CHEMICAL COMPOSITION %:

Copper	Remainder
Phosphorus	7.1
Other (Total)	0.15

#### TYPICAL PHYSICAL PROPERTIES:

Solidus	1310°F (710°C)
Liquidus	1460°F (793°C)
Brazing Range	1345°F- 1500°F (730°C -816°C)
Electrical Conductivity	9.9 (%IACS)
Electrical Resistivity	19.2

#### BRAZING PROPERTIES:

Harris O is an economical alloy designed for brazing copper to copper connections. This alloy flows quickly at brazing temperature so requires close joint tolerance, less than 0.005". is a frequent choice for copper brazing.

Harris O is also a suitable choice for brazing brass. In this application operators should take care to avoid over heating the brass and use Harris Stay Silv® white brazing flux.

Harris O is not recommended for brazing steel or other ferrous base metals. The phosphorus content will form a low ductility intermetallic with the base metal

#### CORROSION RESISTANCE

Generally similar to the copper base metal, but phosphorus containing alloys, including Harris O, should not be used if the braze is exposed to sulfur or sulfur compounds in service.

#### AVAILABLE FORMS

Standard wire diameters rods, spools, and preform rings,

#### RECOMMENDED FLUX:

No flux is required for copper brazing. For brazing brass or copper to brass, use Stay-Silv® white flux. Harris ECO SMART® boric acid free flux, (powder or paste), is an excellent choice to promote sound brazed assemblies and comply with European REACH requirements.

#### SPECIFICATION COMPLIANCE:

AWS A5.8 BCuP-2, ASME Section IIC SFA 5.8 BCuP-2, ISO 17672 CuP 181

#### SAFETY INFORMATION:

**WARNING: PROTECT yourself and others. Read and understand this information.**

**FUMES AND GASES** can be hazardous to your health.

**HEAT RAYS**, (infrared radiation) from flame or hot metal can injure eyes.

- Before use, read and understand the manufacturer's instructions, Safety Data Sheets (SDS), and your employer's safety practices.
- Keep your head out of fumes.
- Use enough ventilation, exhaust at the flame, or heat source, to keep fumes and gases from your breathing zone and the general area.
- Wear correct eye, ear, and body protection.
- See American National Standard Z49.1, *Safety in Welding, Cutting, and Allied Processes*, published by the American Welding Society, 8669 Doral Blvd., Doral, Florida 33166; OSHA Safety and Health Standards, available from the U.S. Government Office, Washington, DC 20402.

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Any suggestion of product applications or results is given without representation or warranty, either expressed or implied. Without exception or limitation, there are no warranties of merchantability or of fitness for particular purpose or application. The user must fully evaluate every process and application in all aspects, including suitability, compliance with applicable law and non-infringement of the rights of others. The Harris Products Group and its affiliates shall have no liability in respect thereof.

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