



A LINCOLN ELECTRIC COMPANY

TECHNICAL INFORMATION SHEET

HARRIS QUICKSILVER™ BRAZING FILLER METAL

NOMINAL CHEMICAL COMPOSITION %:

Phosphorus	7.20
Copper	Remainder
Other (Total)	0.15

TYPICAL PHYSICAL PROPERTIES:

Solidus	1310°F (710°C)
Liquidus	1476°F- 1480°F (802-804°C)
Brazing Range	1350°F- 1500°F (704°C -816°C)
Electrical Conductivity	9.91 (%IACS)
Electrical Resistivity	19.20

BRAZING PROPERTIES:

Quicksilver® is an economical brazing filler metal unused to braze copper to copper and copper to brass. Quicksilver like other phosphorus bearing brazing filler metals is not suitable for brazing steel or other ferrous base metals.

Quicksilver is self-fluxing on copper but requires use of appropriate flux when brazing brass. Quicksilver™ is fluid at brazing temperature with a recommended joint clearance below 0.005".

CORROSION RESISTANCE

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

AVAILABLE FORMS

Standard wire diameters, Preformed rings

RECOMMENDED FLUX:

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

SPECIFICATION COMPLIANCE:

The Harris Products Group Engineering Standards

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.

STATEMENT OF LIABILITY- DISCLAIMER

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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Additional information available at our web site: www.harrisproductsgroup.com