



**T H E H A R R I S P R O D U C T S G R O U P**  
**A L I N C O L N E L E C T R I C C O M P A N Y**  
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**TECHNICAL SPECIFICATION SHEET**

**ALLOY PROPERTIES - FLASH®**

ISO 9001  
 Cert. No. 31598

This is an economical filler metal designed for joining copper, brass, and bronze. The alloy is "self-fluxing" on copper. When joining brass or bronze, a chemical flux, such as Stay-Silv® white, should be employed. The higher phosphorus content allows this alloy to be very fluid and should be used with narrow clearances. The recommended joint clearance is .002"- .004".

**NOMINAL CHEMICAL COMPOSITION:**

Phosphorus 8.11 %  
 Copper Remainder  
 Other Totals 0.15% max.

**PHYSICAL PROPERTIES:**

Solidus	1310°F (710°C)	Color	Bright Shiny Copper
Liquidus	1340-1343°F (726-728°C)	Specific Gravity	8.10
Brazing Temperature Range	1350-1400°F (732-720°C)	Elongation in 2"	32%

**AVAILABLE FORMS:**

Standard wire diameters, preformed rings

**SPECIFICATION COMPLIANCE:**

The Harris Products Group Internal

**RECOMMENDED FLUX:**

No flux required on copper.  
 Stay-Silv® white or black brazing flux with brass alloys.

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

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

**ARC RAYS can injure eyes and burn skin.**

**ELECTRIC SHOCK can KILL.**

- Before use, read and understand the manufacturer's instructions, Material Safety Data Sheets (MSDSs), and your employer's safety practices.
- Keep your head out of fumes.
- Use enough ventilation, exhaust at the arc, or both, to keep fumes and gases from your breathing zone and the general area.
- Wear correct eye, ear, and body protection.
- Do not touch live electrical parts.
- See American National Standard Z49.1, *Safety in Welding, Cutting, and Allied Processes*, published by the American Welding Society, 550 N.W. LeJeune Road, Miami, Florida 33126; OSHA Safety and Health Standards, available from the U.S. Government Office, Washington, DC 20402

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Additional information available at our web site: [www.harrisproductsgroup.com](http://www.harrisproductsgroup.com)

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