

# Stay-Brite® ULTRA

A lead-free solder engineered to provide a ductile, low-temperature alloy to join copper, brass, steel and stainless steel. Stay-Brite® Ultra is excellent for plumbing/potable water connections. It conforms to the requirements of the United States Safe Drinking Water Act. First introduced by Harris in 1956, Stay-Brite® is the #1 solder choice for air conditioning connections.



**FAST.  
STRONG.  
ECONOMICAL.**

## CHEMICAL COMPOSITION & SPECIFICATIONS

<b>Specification</b>	<b>ISO 9453 Grade 703</b>	<b>Antimony (Sb)</b>	0.10 max
<b>Silver</b>	3.3-3.7	<b>Zinc</b>	0.001 max
<b>Nickel</b>	0.01 max	<b>Cadmium</b>	0.002 max
<b>Copper</b>	0.10 max	<b>Tin</b>	Remainder

## PHYSICAL & BRAZING PROPERTIES

<b>Solidus</b>	221°C (430°F)
<b>Liquidus</b>	221°C (430°F)
<b>Color</b>	Bright Silver
<b>Shear Strength</b>	10,600 psi
<b>Electrical Conductivity</b>	16.4% IACS @ 68°F (20°C)
<b>Tensile Strength (Cu to Cu)</b>	14,000 psi
<b>Recommended Joint Clearance</b>	0.051mm - 0.127mm
<b>Tube Burst Strength</b>	3,800 psi

## SOLDERING PROPERTIES

- 66% lower temperature eliminates weakening of base metals by annealment from high brazing heat
- Greater strength of the overall component
- Affinity to bond with ferrous and nonferrous alloys
- Elongation for sound dissimilar metal joints and vibration applications
- 66% lower material cost compared to silver brazing
- Reduced metal discoloration from high heat
- Elimination of oxide scale formed by heat

## Product Part No:

SBU2250  
SBU2500  
SBU3250  
SBU3500

## Description:

2mm 250g Spool  
2mm 500g Spool  
3mm 250g Spool  
3mm 500g Spool

## RECOMMENDED FLUX

**Stay-Clean® paste flux** and **Bridgit® burn-resistant paste flux** for copper and brass. **Bridgit® water-soluble flux** may also be used. **Stay-Clean® liquid flux** for steel or stainless steel, **Stay Clean® liquid flux** provides improved oxide removal and protection when soldering ferrous metals. Remember to remove flux residue after soldering.

## SAFETY

**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.

**SOLDER FLUXES** may contain chlorides, acids or other ingredients that are considered hazardous via inhalation, ingestion, or skin or eye contact.

- Before use, read and understand the manufacturer's instructions, Material Safety Data Sheets, (MSDS), 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.



Stay-Brite® Ultra is certified by The National Sanitation Foundation for use in drinking water system components, NSF 61 and for food equipment materials, NSF 51.



Does not contain prohibited substances in Article 4 of EU directives.



A LINCOLN ELECTRIC COMPANY

## THE HARRIS PRODUCTS GROUP

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