



## TECHNICAL INFORMATION SHEET

### STAY BRITE® #8 TIN/SILVER SOLDER

#### NOMINAL CHEMICAL COMPOSITION%:

Ag 5.5 – 6.0  
Sn Remainder

#### PHYSICAL PROPERTIES:

Solidus 221°C (430°F)  
Liquidus 279°C (535°F)  
Deposit color – silver  
Shear Strength (copper lap joint) – 10,600 PSI  
Electrical conductivity (%IACS) – 16.4  
Density (lbs./cu.in.) – 0.271

#### SOLDERING PROPERTIES:

Stay Brite #8 is a lead free solder engineered to provide a strong, ductile connection on copper, brass, steel, and stainless steel. The silver color is also a good color match to stainless steel. Stay Brite #8 differs from Stay Brite as its higher silver content provides a melting range vs. Stay Brite's single temperature melting point. The melting range makes it suitable for soldering connections with a wider clearance. Stay Brite #8's low temperature characteristic promotes capillary flow and less base metal distortion and oxidation. Stay Brite #8 is often selected for residential HVAC tube connections as an alternative to brazing.

#### AVAILABLE FORMS:

Standard diameters in spools, strip, and rings.

#### RECOMMENDED FLUX:

Harris Stay Clean paste flux and Harris Bridgit® Burn resistant paste flux are good choices for soldering copper and brass. For copper tube plumbing applications Bridgit Water Soluble flux may also be used. For soldering steel or stainless steel Harris Stay Clean® liquid flux is recommended. Stay Clean liquid is an active flux that provides improved oxide removal and protection when soldering ferrous metals. Remove flux residue upon completion.

#### SPECIFICATION COMPLIANCE:

 National Sanitation Foundation (NSF) Standard 51 for food service equipment.

#### 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.  
**SOLDER FLUX** 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.

#### THE HARRIS PRODUCTS GROUP

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