



## TECHNICAL INFORMATION SHEET

### Sterling® Lead-Free Solder

#### CHEMICAL COMPOSITION RANGE %:

Copper - 4.0 – 5.0  
Selenium - 0.04 – 0.20  
Tin - Remainder

#### TYPICAL PHYSICAL PROPERTIES:

Solidus 419°F (215°C)  
Liquids 660°F (350°C)

#### DESCRIPTION:

Sterling lead-free solder is formulated for plumbing and other applications. It has a low melting point yet provides a melting range ideal for filling and capping solder connections. Sterling solder is lead and antimony free.

#### APPLICATION:

Prior to soldering, de-burr tube and fitting, then clean with a brush or Scotch Brite® to remove surface oxide. Brush a light coating of flux on parts. Avoid excess flux that might collect inside the connection.

Apply heat. For plumbing applications, an air/fuel torch is typically used. We recommend a Harris air-fuel hand torch using propane or MAP-Pro® gas. When additional heat is required, a Harris Inferno® torch with a swirl combustion tip provides rapid and controlled heat input. The Inferno uses air/acetylene, (or other fuel gases) to provide increased heating capability.

Parts should be at soldering temperature prior to solder application. Apply flux, preheat tube and fitting, then apply solder. Avoid melting the solder with just the torch flame. Remove flux residue after soldering.

#### RECOMMENDED FLUX:

Harris Water Soluble Plumbing Flux, (ASTM B813), - for copper and brass plumbing applications.

#### SPECIFICATION COMPLIANCE:



ASTM B32 Alloy Grade TC



National Sanitation Foundation

- NSF/ANSI Standard 61, Drinking Water System Components.
- NSF/ANSI 372 & US Safe Drinking Water Act amendments

#### 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 flames or hot metal can injure eyes.**

- Before using it, read and understand the manufacturer's instructions, Safety Data Sheets (SDS), and your employer's safety practices.
- Flux is corrosive and may be harmful or fatal if inhaled or swallowed.
- Flux may cause skin and eye burns.
- 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 a 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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