



## TECHNICAL INFORMATION SHEET

### SAFETY SILV® 45T BRAZING FILLER METAL

#### NOMINAL CHEMICAL COMPOSITION %:

Silver	44.0 – 46.0
Copper	26.0 – 28.0
Zinc	23.0 – 27.0
Tin	2.5-3.5
Other (Total)	0.15

#### TYPICAL PHYSICAL PROPERTIES:

Solidus	1195°F (646°C)
Liquidus	1265°F (685°C)
Brazing Range	1251°F- 1495°F (680°C - 815°C)
Electrical Conductivity	18.05 (%IACS)
Density	4.85 (troy ounces. /cu.in.).

#### BRAZING PROPERTIES:

Safety Silv 45T is a cadmium free alloy offering a lower melting temperature than Safety Silv 45. It exhibits good flow properties and excellent fillet forming qualities. This alloy will produce high strength ductile joints in copper, brass, and steel.

#### RECOMMENDED FLUX:

Stay-Silv® white flux is suitable for many applications. Stay-Silv® black brazing flux is often used when brazing stainless steel or where heating cycles are prolonged or focused as in induction brazing. Harris ECO SMART® boric acid free flux, (powder or paste), is an excellent choice to promote sound brazed assemblies and comply with European REACH requirements.

Safety Silv 45T in rod form is available with an extruded flux coating. The flux coating eliminates the need for a separate flux application. Flux coated rods provided a controlled amount of flux vs. manual flux application. For larger assemblies ensure flux amount is adequate for required braze penetration.


Remove flux residue after brazing.

#### AVAILABLE FORMS

Standard wire diameters in coils, rods, and preform rings.

#### SPECIFICATION COMPLIANCE:

ANSI/AWS A5.8, ASME SFA 5.8, Class BAg-36

 National Sanitation Foundation, (NSF), ANSI Standard 51 Food Equipment Materials.

#### 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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