



TECHNICAL INFORMATION SHEET

SAFETY SILV® 45 BRAZING FILLER METAL

NOMINAL CHEMICAL COMPOSITION%:

Silver	44.0 – 46.0
Copper	29.0 – 31.0
Zinc	23.0 – 27.0
Other (Total)	0.15

TYPICAL PHYSICAL PROPERTIES:

Solidus	1225°F (663°C)
Liquidus	1370°F (743°C)
Brazing Range	1370°F- 1550°F (740°C -845°C)
Electrical Conductivity	18.9 (%IACS)
Density	4.79 (t.o./cu.in.)

BRAZING PROPERTIES:

This 45% silver brazing filler metal has been used for decades as a popular choice to braze copper, brass, steel, and stainless steel. A cadmium free alloy with a melting range of approximately 145°F, Safety Silv 45 provides good fillet forming qualities and is suitable for filling loose connections. The alloy has excellent joint strength and ductility at a moderately higher temperature. Preferred base metal clearance range is 0.003 – 0.006".

AVAILABLE FORMS

Standard wire diameters, preform rings, rods, (bare and flux coated), and wound on spools.

RECOMMENDED FLUX:

Stay-Silv® white flux is suitable for many applications. Stay-Silv® black brazing flux is often used if 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.

SPECIFICATION COMPLIANCE:

ANSI/AWS A5.8 ASME SFA 5.8, QQ-B-654A Class BAg-5, ISO 17672 Ag 245,

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, 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.

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