



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, QQ-B-654a BAg-5

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.

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