



TECHNICAL INFORMATION SHEET

SAFETY SILV® 50 BRAZING FILLER METAL

NOMINAL CHEMICAL COMPOSITION%:

Silver	49-51
Copper	33- 35
Zinc	14-18
Other (Total)	0.15

TYPICAL PHYSICAL PROPERTIES:

Solidus	1270°F (688°C)
Liquidus	1425°F (774°C)
Brazing Range	1425°F- 1600°F (775°C -870°C)
Electrical Conductivity	25.5 (%IACS)
Density	4.94 (Troy ounces./cu.in.).

BRAZING PROPERTIES:

Safety Silv 50 is a cadmium free alloy with a melting range of approximately 175°F (70°C). This promotes better fill on I connections where a wider clearance may be encountered. Safety Silv 50 is suitable for joining copper, steel, and brass alloys. It is sometimes used for torch brazing applications where a higher braze joint electrical conductivity is desired. The reduced zinc content improves brazed joint ductility.

AVAILABLE FORMS:

Standard wire diameters - preform rings, coils, and rod.

SPECIFICATION COMPLIANCE:

ANSI/AWS A5.8, ASME SFA 5.8, Class BAg-6,
ISO 17672 Ag 250

RECOMMENDED FLUX:

Stay Silv® white flux is suitable for some applications. Stay Silv® black brazing flux is often used if brazing stainless steel or tungsten carbide and 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 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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