



## TECHNICAL INFORMATION SHEET

### SAFETY SILV® 40 BRAZING FILLER METAL

#### CHEMICAL COMPOSITION %:

Silver	39.0-41.0
Zinc	27.5-31.5
Copper	29.5-31.5
Other (Total)	0.15 maximum

#### PHYSICAL PROPERTIES:

Solidus 1250° F (677° C)  
Liquidus 1350° F (732° C)  
Density 4.76 troy ounces per cu.in.  
Electrical Conductivity 20.3 % IACS

#### BRAZING PROPERTIES:

Safety Silv 40 brazing filler metal is formulated for brazing copper, brass, and steel. The melting range allows use where part clearance cannot be tightly controlled. This braze alloy offers good flow characteristics and the opportunity for cost reduction compared with traditional 45% silver alloys.

#### RECOMMENDED FLUX:

Stay Silv® white flux is suitable for most 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 is an excellent choice to promote sound brazed assemblies and comply with European REACH requirements.

Safety Silv 40 is also available as a flux coated rod. The extruded flux coating provides a convenient flux application method and eliminates the extra step of manually fluxing parts. Flux coated rods provide a limited amount of the flux necessary to protect parts during heating. Because of this flux coated rod use may be limited to smaller assemblies.

#### SPECIFICATION COMPLIANCE:

Produced to Harris Products Group Engineering Standards

#### AVAILABLE FORMS

Standard wire diameters in coils and rod  
Flux coated rod  
Preformed braze rings

#### 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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