



TECHNICAL INFORMATION SHEET

STAY SILV® 6 BRAZING FILLER METAL

NOMINAL CHEMICAL COMPOSITION%:

Phosphorus	6.4-6.5
Copper	Remainder
Silver	5.8-5.9
Other (total)	0.15

TYPICAL PHYSICAL PROPERTIES:

Solidus	1190°F (643°C)
Liquidus	1425°F (774°C)
Brazing Range	1330°F- 1500°F (721°C -815°C)
Electrical Conductivity	8.8 (% IACS)
Density	4.26 (lb. /cu.in.)

BRAZING PROPERTIES:

Stay Silv 6 is medium range silver brazing filler metal designed for copper to copper applications. It can also be used on copper to brass with appropriate brazing flux. Stay Silv 6 has lower phosphorus content than the AWS BCuP- 4 classification, (Stay Silv 6HP). This creates an alloy well suited for many brazing applications. The melting range makes it useful for assemblies with wider clearance. Stay Silv 6 is often used in rod form for manual braze applications but is a good choice formed as brazing rings or on spools for semi-automated applications.

Stay Silv 6 is not recommended for brazing steel or other ferrous base metals. In these applications the phosphorus content promotes formation of a low ductility intermetallic with the base metal.

CORROSION RESISTANCE

Generally similar to the copper base metal, but phosphorus containing alloys, including Stay Silv 6, should not be used if the braze is exposed to sulfur or sulfur compounds in service.

AVAILABLE FORMS

Standard wire diameters, preform rings, and wound on spools.

RECOMMENDED FLUX:

No flux is required for copper brazing. For brazing brass or copper to brass Stay-Silv® white flux is suitable for most applications. Harris ECO SMART® boric acid free flux, (powder or paste), is also an excellent choice to promote sound brazed assemblies and comply with European REACH requirements

SPECIFICATION COMPLIANCE:

Produced to Harris Products Group engineering standards.

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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