

# **TECHNICAL INFORMATION SHEET**

## STAY-SILV® 15 BRAZING FILLER METAL

#### NOMINAL CHEMICAL COMPOSITION%:

Phosphorus	4.8-5.2
Copper	Remainder
Silver	14.5-15.5
Other (Total)	0.15

#### **TYPICAL PHYSICAL PROPERTIES:**

 Solidus
 1190°F (643°C)

 Liquidus
 1475°F (802°C)

 Brazing Range
 1300°F- 1500°F (704°C -816°C)

 Electrical Conductivity
 9.9 (%IACS)

 Electrical Resistivity
 17.4

#### **BRAZING PROPERTIES:**

Stay Silv 15 brazing filler metal is a frequent choice for brazing copper, especially in brazing air conditioning and refrigeration connections. The alloy has a wide melting range which allows the operator to fill loose connections and "cap" or build up around the finished joint. When heated above its liquidus temperature, however, it will flow into tight connections.

Stay Silv 15 can be used to braze brass with the use of appropriate brazing flux. Stay Silv 15 is not recommended for brazing steel or other ferrous metals due to sufficient lack of joint ductility. It is generally suitable for brazing low nickel, (10% maximum), copper/nickel base metals.

#### **CORROSION RESISTANCE**

Generally similar to the copper base metal, but phosphorus containing alloys, including Stay Silv 15, should not be used if the braze is exposed to sulfur or sulfur compounds in service.

#### **AVAILABLE FORMS**

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

### **RECOMMENDED FLUX:**

No flux is required for copper brazing. For brazing brass or copper to brass Stay-Silv<sup>®</sup> white flux is suitable for most applications. Harris ECO SMART<sup>®</sup> 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:

ANSI/AWS A5.8 Class BCuP-5, ASME SFA 5.8 Class BCuP-5, QQ-B-654A BCuP-5, ISO 17672 CuP 284

#### 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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