

# TECHNICAL INFORMATION SHEET

# STAY SILV® 6HP PASTE BRAZE FILLER METAL

#### CHEMICAL COMPOSITION%:

 $\begin{array}{ccc} \text{Phosphorus} & 7.0-7.5 \\ \text{Silver} & 5.8-6.2 \\ \text{Copper} & \text{Remainder} \\ \text{Other (total)} & 0.15 \end{array}$ 

#### **PHYSICAL PROPERTIES:**

Solidus 1190F (643°C) Liquidus 1325°F (718°C) Brazing Range 1275°F- 1450°F (690°C - 788°C)

Viscosity (@  $75^{\circ}$ F): 24 – 66 (Brookfield Model HAF Viscometer with helipath stand, TD spindle @ 5 rpm).

Powder Mesh Size: 100 (US Standard Sieve)

Powder content %: 77-82

### **BRAZING PROPERTIES:**

Stay Silv 6HP brazing paste is a powder form of braze alloy mixed in a custom flux/binder to form a paste. The paste is applied to the part prior to brazing. During heating the binder burns off and the filler metal powder melts when brazing temperature is reached. This product is primarily used in automated or semi-automated brazing applications.

Stay Silv 6HP is fluid at brazing temperature and best results occur with clearances of 0.001" – 0.003", (0.03 mm – 0.08 mm).

6HP paste is not recommended for brazing steel or other ferrous alloys. The phosphorus content will form a low ductility intermetallic with the base metal. Phosphorus containing brazing alloys should not be used if the braze is exposed to sulfur compounds or sulfurous atmospheres in service.

# RECOMMENDED APPLICATION AND FLUX:

6HP paste composition is formulated to braze copper. No additional flux is required for this base metal as the phosphorus content makes the alloy "self-fluxing".

# **SPECIFICATION COMPLIANCE:**

AWS A5.8 BCuP-4, (metal powder)

#### STORAGE AND HANDLING:

Store in a cool, dry environment. Recommended storage temperature range is between 60 - 70°F. Avoid extreme heat and cold and do not allow product to freeze.

Keep the container tightly sealed to prevent drying or moisture pick up when not in use. Replace syringe tips and use Teflon® tape to seal containers or packages.

Stir product in containers with a spatula prior to loading in dispensers. This will ensure even mixture of powder and binder. Use caution to minimize air entrapment.

When correctly stored, shelf life of jars, pails, and drums is typically least six months. Syringe and cartridges are approximately three months.

## **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 NW 36 Street, #130, Miami, Florida 33166-6672; 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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