



## TECHNICAL INFORMATION SHEET

### STAY SILV<sup>®</sup> BLACK BRAZING FLUX

#### DESCRIPTION:

Stay Silv<sup>®</sup> black paste flux is a homogenous brazing flux formulated to provide smooth flux application, even coverage, and excellent protection during brazing. The addition of boron extends the active life of the flux which enables it to withstand longer heating cycles. This makes it an ideal choice for induction brazing where intense localized heating is a factor, or heavy parts which often require longer heating time.

Stay Silv black flux is recommended for brazing copper and copper alloys, (except aluminum bronze), steel, and other ferrous base metals. Stay Silv black flux is often used in brazing stainless steel, nickel alloys, and tungsten carbide.

This flux is used with many high silver brazing filler metals of the AWS A5.8 BAg classifications and ISO 17672 class Ag alloys. It is also suitable for use with many phosphorus-copper-silver alloys, (AWS BCuP and ISO CuP), for brazing copper to brass.



Black flux turns clear, (transparent), close to brazing application temperature. This is a useful indicator in timing braze wire application.

Flux may be water thinned but care should be taken to avoid excess dilution.

#### ACTIVITY RANGE:

1050 – 1700°F (565 - 925°C)

#### FLUX REMOVAL:

Post braze flux residue should be removed to avoid potential corrosion. A hot water wash and brushing with a rag or non-woven abrasive pad, (e.g. Scotch-Brite™), is often sufficient. Additional measures include mechanical cleaning with a wire brush, steam jet, or abrasive blasting media such as grit, soda, or dry ice. Production post-braze cleaning can also be accomplished with proprietary chemical formulas such as Bernite<sup>®</sup> 45 available from Harris Products Group. This approach is suitable where parts lend themselves to a water bath/tank immersion.

#### AVAILABLE CONTAINERS:

½ lb. jars, 1 lb. jars, 5 lb. jars, 30 lb. pail, 60 lb. pail.

#### SPECIFICATION COMPLIANCE:

AWS A5.31 Classification FB3 C  
AMS 3411  
Federal Specification O-F-499, Type B  
EN 1045 Type FH12

#### SAFETY INFORMATION:

**WARNING: CONTAINS FLUORIDES.**  
**PROTECT YOURSELF AND OTHERS. Read and understand this information. BURNS EYS AND SKIN. CAN BE FATAL IF SWALLOWED.**  
**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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