



TECHNICAL INFORMATION SHEET

STAY SILV® 50N BRAZING FILLER METAL

CHEMICAL COMPOSITION %:

Silver	49.0-51.0
Zinc	13.5-17.5
Copper	14.5-16.5
Cadmium	15.0-17.0
Nickel	2.5-3.5
Other (Total)	0.15

PHYSICAL PROPERTIES:

Solidus 1170F (632C)
Liquidus 1270F (688C)
Density 4.99 troy ounces per cu.in.
Electrical Conductivity 18.0% IACS

BRAZING PROPERTIES:

Stay Silv 50N brazing filler metal is designed for brazing copper, brass, steel, nickel alloys, and stainless steel. Stay Silv 50N exhibits improved corrosion resistance on stainless steel compared to many silver braze alloys. It is frequently used to braze tungsten carbide to steel and tool steel for cutting tips, drill bits, and saw blades as the 3% nickel addition improves wetting and strength.

Stay Silv 50N can be an acceptable choice for applications where sufficient fume ventilation/exhaust equipment is in place to assure operators are not exposed to cadmium oxide fume.

AVAILABLE FORMS

Standard wire diameters in coils and rod
Preform rings
Strip
Shims/shapes

SPECIFICATION COMPLIANCE:

ANSI/AWS A5.8 Class BAg-3, ASME SFA5.8 Class BAg-3,
QQ-B-654A Grade V, ISO 17672 Ag 351

RECOMMENDED FLUX:

Stay-Silv® white flux is suitable for many applications. Stay-Silv® black brazing flux is often used to braze stainless steel, tungsten carbide, or where heating cycles are prolonged or heat is focused as in induction furnace brazing.

SAFETY INFORMATION:

WARNING: PROTECT yourself and others. Read and understand this information.

CONTAINS CADMIUM – FUMES ARE POISONOUS AND CAN KILL – DO NOT BREATHE FUMES. EVEN BRIEF EXPOSURE TO HIGH CONCENTRATIONS SHOULD BE AVOIDED.

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.

THE HARRIS PRODUCTS GROUP

A LINCOLN ELECTRIC COMPANY

4501 Quality Place • Mason, OH 45040 U.S.A Tel: 513-754-2000 Fax: 513-754-6015
Additional information available at our web site: www.harrisproductsgroup.com