



TECHNICAL INFORMATION SHEET

SAFETY SILV® 49NM CLAD™ STRIP BRAZING FILLER METAL

CHEMICAL COMPOSITION (braze cladding), %:

Silver	48.0 – 50.0
Zinc	21.0 – 25.0
Copper	15.0 – 17.0
Nickel	4.0 – 5.0
Manganese	7.0 – 8.0
Other (Total)	0.15

PHYSICAL PROPERTIES (braze cladding):

Solidus 1260° F (682° C)
Liquidus 1290° F (698° C)

BRAZING PROPERTIES:

Safety Silv 49NM-Clad is a three layer composite metal in a 1-2-1 ratio, (braze alloy, copper, braze alloy). Safety Silv 49NM Clad is frequently used to braze tungsten carbide inserts on larger size tools. In these applications the different coefficient of expansion between the dissimilar metals often leads to cracking. The center copper layer minimizes contraction stress set up during cooling to prevent this issue.

AVAILABLE FORMS

Strip

SPECIFICATION COMPLIANCE:

Braze alloy cladding conforms to AWS A5.8 Classification BAg-22.

RECOMMENDED FLUX:

Stay-Silv® black brazing flux is often used to braze tungsten carbide and other applications. It is especially helpful when heating cycles are prolonged or where heat is focused as in induction brazing. Harris ECO SMART™ Boric Acid Free High Heat flux, (powder and paste), is an excellent choice to promote sound brazed assemblies and comply with European REACH requirements.

Remove all flux residue after brazing.

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 Doral Blvd., Doral, Florida 33166; OSHA Safety and Health Standards, available from the U.S. Government Office, Washington, DC 20402

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