



## TECHNICAL INFORMATION SHEET

### SAFETY SILV<sup>®</sup> 45 FLUX CORED BRAZING FILLER METAL

#### BRAZING PROPERTIES:

Safety Silv<sup>®</sup> 45 flux cored brazing filler metal combines the industry accepted 45% braze alloy with an inner core of brazing flux. The unique design eliminates the need for a separate flux application. This reduces labor and minimizes the amount of applied flux so post-braze cleaning time is often less.

Safety Silv<sup>®</sup> 45 flux cored wire has a wide melting range so it is useful in filling connections where tight clearance cannot be maintained. It is cadmium free and is an excellent replacement for many of the hazardous cadmium containing brazing products. Safety Silv<sup>®</sup> 45 flux cored alloy is primarily used to braze copper, brass, bronze, and steel.

#### FLUX CORE:

This alloy contains a continuous internal core of brazing flux. No additional flux is required. Remove flux residue after brazing.

#### CHEMICAL COMPOSITION RANGE % (metal):

Silver	45.0 - 46.0
Copper	29.0 - 31.0
Zinc	23.0 - 27.0
Other elements	ISO & AWS requirements

#### MELTING TEMPERATURE:

Solidus 1225°F (663°C)  
Liquidus 1370°F (743°C)

#### AVAILABLE FORMS:

Standard wire diameters in coil, rod, preformed rings, or wound on spools for automated feeding.

#### SPECIFICATION COMPLIANCE (metal component):

AWS A5.8 BAg-5, ASME SFA 5.8 BAg-5, ISO 17672 Ag 245,

#### RoHS (Reduction of Hazardous Substances):

Conforms to the EU hazardous substance directive.

#### SAFETY INFORMATION:

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

**FUMES AND GASES can be hazardous to your health.**

**FLUX CONTAINS FLUORIDES – avoid breathing fumes generated during brazing.**


**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](http://www.harrisproductsgroup.com)