

## HGW SILV 45

### Brazing Alloy Specifications

#### STANDARD

- ISO 17672 Standard: Ag 145
- AWS A5.8 Standard: BAg-36

#### COMPOSITION (w.%)

- Ag: 44-46 | Cu: 29-31 | Zn: 23-27 | Other: ≤0.15

#### PROPERTIES

- |                                       |                                       |
|---------------------------------------|---------------------------------------|
| • Solidus (°C): 665                   | • Liquidus (°C): 745                  |
| • Solidus (°F): 1229                  | • Liquidus (°F): 1373                 |
| • Brazing Temperature (°C): 710-730   | • Brazing Temperature (°F): 1310-1378 |
| • Electrical Conductivity (%IACS): 18 | • Resistance (microhm-cm): 9.6        |
| • Elongation: 14%                     | • Tensile Strength (MPa): 500         |
| • Density (g/cm <sup>3</sup> ): 9.08  |                                       |

#### MANUFACTURE CAPABILITIES

- Wire Diameter Range (mm):  $\Phi$ 0.3- $\Phi$ 2.0 (spool) /  $\Phi$ 2.0 and above (coil)
- Rod Diameter and Length Range (mm):
  - diameter: 1.0-6.0 / length: 1-1000
- Strip Thickness and Width Range (mm):
  - thickness: above 0.05 / width: 3-80
- Other Forms: Ring

#### APPLICATIONS

- Application: Used for the brazing of copper and copper alloys, as well as for copper and ferrous metals.
- Characteristics: This alloy has excellent wettability, spreadability and mechanical properties. It is suited for the brazing of joints which have high requirement for surface smoothness, joint strength, and the ability to withstand vibration. It is widely used in the industries of electronics, food and HVAC. This is a classic Ag-Cu-Zn product.

#### STORAGE

The products shall be stored in its package with proper sealing. The warehouse where the brazing alloys are stored shall be dry and well-ventilated. Do not store the products with volatile and corrosive substances, such as acid and alkali.