



## TECHNICAL INFORMATION SHEET

### ALUXCOR™ 4047 ALUMINUM FLUX CORED BRAZE FILLER METAL

#### DESCRIPTION

Aluxcor 4047 flux cored brazing wire is designed for manual and semi-automatic aluminum flame brazing. A common application is brazing HVAC aluminum components including return bends, headers, tube assemblies, and distributors. The flux core eliminates the need for a separate flux application and the core cross section is designed to release a measured amount of flux into the capillary. This ensures good oxidation protection and suitable capillary fill by the melted aluminum metal.

Aluxcor 4047 is available with different flux compositions. Each flux chemistry and ratio is designed to provide brazing characteristics engineered for your specific application.

*Formula 15.1* is a potassium fluoroaluminate salt with a melting range of 1049 ° - 1061° F, (564° - 572°C).

*Formulas 15.2, 15.3 and 15.4* are cesium fluoroaluminate blends which lower flux activity temperature and corresponding brazing temperature. Inclusion of this compound also allows brazing of magnesium containing base metals like 6063.

All flux core compositions are non-hygroscopic so post braze flux residue does not need to be removed.

#### NOMINAL CHEMICAL COMPOSITION, (4047 METAL) %

Si	12.0
Fe	0.8 max.
Cu	0.30 max
Mn	0.15 max
Mg	0.10 max
Zn	0.20 max
Be	0.0003 max
Others	0.15 total
Al	Remainder

#### PHYSICAL PROPERTIES, (4047 METAL)

Solidus 1070°F (577°C)  
Liquidus 1080°F (582°C)

Brazing Range 1080°F- 1120°F (582°C - 605°C)  
Electrical Conductivity: 40 (%IACS)  
Weight in ft./lb. (0.090 dia.) 184.5

#### AVAILABLE FORMS

Standard diameters in coils, rods, spools, and formed rings.

#### SPECIFICATION COMPLIANCE

Metal – AWS A5.8 Classification BAISi-4  
ISO 17672 Code AI 112

Flux – Conforms to Harris Products Group engineering standard for cored brazing material.

#### 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, 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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