

Technical Data Sheet

51F, 52 and 52F Brazing Alloy



Overview

51F Brazing Alloy

Cadmium-Free, High-Strength Flux-Coated Silver Alloy for Brazing Ferrous and Non-Ferrous Metals

A highly efficient flux provides exceptional cleaning action and wetting, allowing 51F to bond to dirty, and even burned, surfaces. Thin flow and good capillary action make 51F Brazing Alloy easy to use on irregular and long lap joints.



Features/Benefits

- Low heat application
- Excellent wettability
- Cadmium-free alloy
- Excellent electrical conductivity

Applications

- Instrumentation
- Electrical appliances
- Control switches
- Pattern and trim work
- Laboratory and food-processing equipment
- Surgical and dental equipment

Method of Application

Torch

Identification

White flux-coated silver alloy

Directions for Use

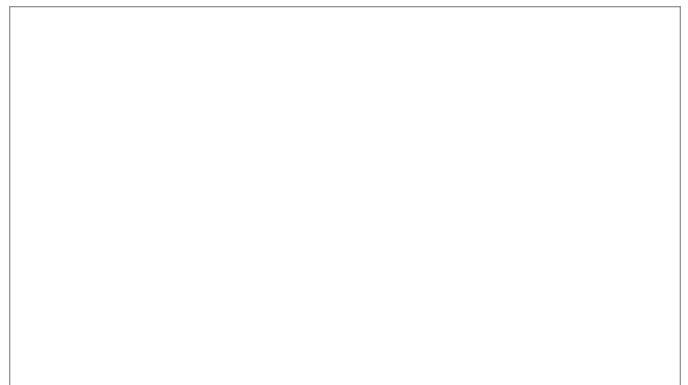
Clean materials to be joined to assure they are free from grease, oil and jagged edges. Use a slightly carburizing flame. Heat a broad area along the joint line. Keep the flame cone 1" away from the silver brazing alloy to produce a continuous fillet. 51F and 52F are self-fluxing. Use F40 flux for 52 Bare.

Technical Specifications

Tensile Strength: Up to 73,000 PSI (503 MPa)
Elongation: Up to 24%
Melting Temperature: 1,225°F to 1,370°F (665°C to 745°C)
Flux Coating Color: White

Technical Tips

Use F40 Flux when additional flux is needed.





Overview

52 and 52F Brazing Alloys

Cadmium-Free Silver Alloys with Superior Electrical Conductivity for Poor Fit Joints and Buildup

52 and 52F Brazing Alloys are bare silver alloys that work well with an oxyacetylene torch, induction heating and furnace applications. Their unique flux coating resists breaking and chipping even if bent, to braze hard-to-reach joints. The wide plastic range makes 52 and 52F excellent for poor fit joints and buildup.



Features/Benefits

- Thin flow provides excellent capillary action
- Excellent electrical conductivity
- Low melting temperature

Applications

- Electrical conductors
- Busbars
- Appliances
- Regulators
- Controls and switches
- Instrumentation

Method of Application

Oxyacetylene torch

Identification

52 – bare silver rod; 52F – yellow flux-coated rod

Directions for Use

Clean materials to be joined to assure that they are free of grease, oil and jagged edges. Use a slightly carburizing flame. Heat a broad area along joint line. Keep the flame cone 1" away from filler alloy and produce a continuous fillet. Use F40 flux with 52. 52F is self-fluxing.

Technical Specifications

Tensile Strength: 70,000 PSI (483 MPa)
 Melting Temperature: 1,250°F to 1,410°F (675°C to 765°C)
 Flux Coating Color: Yellow

Technical Tips

Use F40 Flux when brazing with 52 or when additional flux is needed.