

## ALLOY AIM 47

### FEATURES

- ▶ Fusible Alloy
- ▶ Low Melting Temperature 47°C

### DESCRIPTION

AIM's AIM 47 is composed of Bismuth, Lead, Indium, Tin, and Cadmium. This alloy has a melting temperature of 47°C (117°F). Aim 47 typically is used for lens fixturing, proof soldering applications, and for unique low temperature soldering applications.

### MAJOR ALLOY INGREDIENTS IN PERCENT

Bi	Pb	In	Sn	Cd
44.7%	22.6%	19.1%	8.3%	5.3%

### USER INSTRUCTIONS

- ▶ Melt alloy using double boiler or a low temperature melt pots. Set pot at 120°F.
- ▶ For tube blending:
  - ▶▶ Plug one end of the tube. Fill tube with oil. Pour oil out of tube and then pour in the molten alloy. Quench tube in cold water.
  - ▶▶ When tube is at room temperature, bend. After bend, place tube in hot water set at 120°F. Pour metal back in original container.
- ▶ For die cavity dimensioning or proof casting:
  - ▶▶ Pour molten metal into cavity to be checked. Make sure there are not any under cuts. Knock out proof cast. This will be dimensionally stable. This alloy is sensitive enough that if poured on a dollar bill to pick up the impression from the bill.

### HANDLING & STORAGE

Refer to Material Safety Data Sheet for specific handling and storage information.

### FLUX COMPATIBILITY

AIM 47 is compatible with most grades of industrial flux.

### CLEANING

Refer to data sheets provided by flux manufacturer.

### SAFETY

Use with adequate ventilation and proper personal protective equipment. Refer to the accompanying Material Safety Data Sheet for any specific emergency information. Do not dispose of any hazardous materials in non-approved containers.