



Brazing Alloy for Light Metal Joints

# **EutecRod®**

## **1804**



- Good for tight to moderate joint clearances
- Self-fluxing in copper to copper applications
- Withstands constant service temperatures up to 300°F (150°C)

# EutecRod® 1804

EutecRod 1804 is a copper-phosphorus alloy. Excellent brazeability on copper-based alloys when used with FloTectic 1100 or XuperBraz 100 fluxes.

## TECHNICAL DATA

### Typical Values

Tensile Strength:	50,000 psi (345 N/mm <sup>2</sup> )
Solidus*:	1190°F (645°C)
Liquidus**:	1325°F (720°C)
Max. Brazing Temp.:	1500°F (815°C)
Electrical Conductivity:	9.5% IACS
Electrical Resistivity:	18.2 MichrOhm-cm
Heating Method:	Oxy-fuel torch, induction, furnace brazing

\*The solidus temperature is the highest temperature at which the part remains solid i.e. the start of melting.

\*\*The liquidus temperature is the lowest temperature at which the part is molten i.e. complete melting.

## PROCEDURE FOR USE

**PREPARATION:** Clean joint area with RotoClean OS or use a VOC-free solvent. Align parts and preheat locally to facilitate quicker joint area heat-up. When brazing copper to brass or bronze paint joint area and rod with FloTectic 1100.

**TECHNIQUE:** Use a 2x carburizing flame to prevent oxidation. After preheating, deposit filler metal using a continuous “drop-and-melt” technique. *Note that 1803 is very fluid. Make sure that the joint gaps do not exceed 0.005”.* Continue until the joint is slightly overfilled.

*Note: When using a flux any “glassy” residue can be readily removed by light scraping.*

**POST-BRAZING:** If necessary, parts can be cooled in water.

## TYPICAL APPLICATIONS

EutecRod 1804 is an economical alloy for repairing radiators, joining various plumbing connectors, air-conditioning coils, and copper tubing.

Minimal clean-up required. Water and brushing are sufficient when necessary.



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