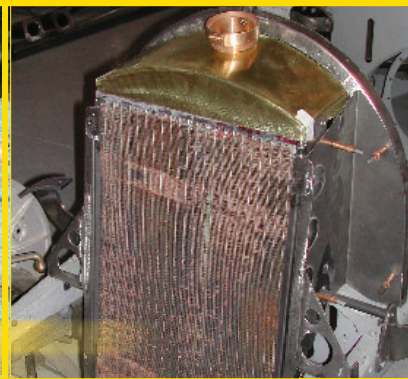
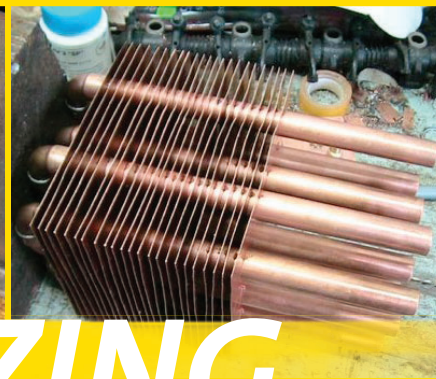


Brazing Alloy for Light Metal Joints

# EutecRod<sup>®</sup> 1804



## BRAZING

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



## DESCRIPTION:

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

## TECHNICAL DATA:

Typical 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 and 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.

## TYPICAL APPLICATIONS:

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

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

## BRAZING METHOD:

**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 1804 is very fluid.** Make sure that 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.

## YOUR RESOURCE FOR PROTECTION, REPAIR AND JOINING SOLUTIONS



EUTECTIC CORPORATION  
N94 W14355 Garwin Mace Drive  
Menomonee Falls, WI 53051 USA  
Tel.: +1 (800) 558-8524  
eutectic.com

EUTECTIC CANADA  
428, rue Aimé-Vincent  
Vaudreuil-Dorion, Québec  
J7V 5V5 Canada  
Tel.: +1 (800) 361-9439  
eutectic.ca



Statement of Liability: Due to variations inherent in specific applications, the technical information contained herein, including any information as to suggested product applications or results, is presented without representation or warranty, expressed or implied. Without limitation, there are no warranties of merchantability or of fitness for a particular purpose. Each process and application must be fully evaluated by the user in all respects, including suitability, compliance with applicable law and non-infringement of the rights of others, and Eutectic Corporation and its affiliates shall have no liability in respect thereof.

1804 06/17 © 2008, Eutectic Corporation, ® Reg. T.M., Printed in the U.S.A.