

UNITED ALLOY # 400 SERIES

Thank you for using UNITED'S alloys.

UNITED # 400 SERIES ALLOYS may be used for **9 K – 14 K casting** with the exceptions # 450 for **14 K only**.

You should obtain excellent results by following a few simple instructions.

MELTING

We do recommend pre-alloying all alloy and fine gold with aggressive stirring & fluxing to assure a uniform mixture.

Step : 1	Pre- Alloying (Fine gold + alloy) Temperature	1030° - 1065° C 1900° - 1950° F
Step : 2	Casting Temperature for 9 K – 10 K Alloyed Grain	990° - 1020° C 1815° - 1870° F
	Casting Temperature for 14 K Alloyed Grain	970° - 990° C 1780° - 1815° F

We do recommend pre-graining all alloy and fine gold before casting to assure a uniform mixture.

NOTE: Melt temperature may vary with type of unit. This alloy is designed for casting only.

FLASK TEMPERATURE

Normal recommended temperature in the range of **580° C to 700° C / 1076° F – 1292° F** depending on size of flask, karat & type of jewelry.

FLUXING

Boric Acid is the recommended flux. Use as little flux as possible. Do not use carbon fluxes or any fluxes designed for refining; i.e., soda ash, saltpeter, etc. Avoid flux in bottom pour automatic casting units.

QUENCH TIME

15 – 20 minutes.

INVESTMENT REMOVAL

Most standard investment removers will successfully remove the investment powder. Fluoric-based investment removers are the best for removing the silicon oxide invisible coating. Use of aggressive acids causes stress corrosion and surface damage and is therefore not recommended.

UNITED'S Brite-Cast™ Investment Remover works effectively in removing fire scale as well as preventing stress corrosion or surface damage of the cast piece.

REMELTING

We recommend a 50% fresh mix for re-melting, unless our # 99 Alloy Replenisher is used.

TECHNICAL ASSISTANCE

Always available... Call 1-800-999-3463 / 1-800-999-FINE
E-mail / doc@unitedpmr.com Web-Site / www.unitedpmr.com

2781 Townline Road, Alden, NY 14004, USA.

Phone : (800) 999-3463; International Phone : +1-(716)-683-8334

Fax : (800) 533-6657; International Fax : +1-(716)-683-5433

E mail: sales@unitedpmr.com; Website: www.unitedpmr.com