



### UNITED ALLOY # 970

Thank you for using UNITED'S alloys.

UNITED'S 970 ALLOY may be used for 10K & 14K white gold casting, which produces a off-white finished color. #970 contains silicon, and boron deoxidizers.

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

#### **MELTING**

Melt Temperature for 10K Alloyed Grain	1010° - 1020° C. 1850° - 1868° F.
Melt Temperature for 14K Alloyed Grain	980° - 990° C. 1796° - 1814° F.
Melt Temperature for Alloying	1040° - 1050° C. 1904° - 1922° F.

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

#### **FLASK TEMPERATURE**

We suggest a slightly higher flask temperature for white gold.

#### **FLUXING**

Fluxing white gold is extremely important to pick-up oxides. Boric Acid is the recommended flux. 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 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. UNITED'S Brite-Cast Investment Remover also works very well.

#### **REMELTING**

We recommend a 70% fresh - 30% scrap mix. White gold alloy has about 1/3 the reusability of yellow gold alloys.

#### **NOTES**

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

#### **TECHNICAL ASSISTANCE**

Always available...  
Call 1-800-999-3463 / 1-800-999-FINE.  
E-mail / [doc@unitedpmr.com](mailto:doc@unitedpmr.com)  
Web-Site / [www.unitedpmr.com](http://www.unitedpmr.com)

**2781 Townline Road, Alden, NY 14004**

Phone: 1 (800) 999-FINE (3463) Intl. Phone: + 1 (716) 683-8334

Fax: 1 (800) 533-6657 Intl. Fax: +1 (716) 683-5433

E mail: [sales@unitedpmr.com](mailto:sales@unitedpmr.com) Website: [www.unitedpmr.com](http://www.unitedpmr.com)