UNITED PRECIOUS METAL REFINING, INC.

# UNITED "WHITE" ALLOY # PD1

**Composition:** ***Silver 62%, Copper 8 %, Zinc 9%, Palladium 21%***

Thank you for using UNITED'S alloys.

UNITED'S **# PD1** Palladium white alloy is a ***NICKEL FREE*** white gold master alloy. **PD1** is designed for **9 K – 14 K casting**. The color produced will be **White,** which should be Rhodium plated for optimum color. **PD 1** alloy **can be used in regular investment and regular gold & silver casting machines.**

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.

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|---|---|---|
| **Step : 1** | Pre- Alloying (Fine gold + alloy) Temperature | **1130° - 1140° C**<br>**2066° - 2084° F** |
| **Step : 2** | Casting Temperature for 9 K – 14 K Alloyed Grain | **1120° - 1130° C**<br>**2048° - 2066° F** |

**NOTES: Melt temperature may vary with type of unit. This alloy is designed for casting but may be used for hand-made.**

**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 50% rejuvenation for re-melting. Reuse will be limited to a few melts.

**TECHNICAL ASSISTANCE**

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

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