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## UNITED “VERY WHITE” ALLOY # PD-17

**Composition:** 56.50 % PD, 22.50% CU, 12.00% ZN, 9.00% AG

Thank you for using UNITED’S alloys.

UNITED’S # **PD-17** Palladium white alloy is a **nickel free white master alloy**. **PD-17** alloy is designed for **18K** castings & fabrication only. The color produced using this alloy will be **Very White**. Rhodium plating is recommended for optimum color. **PD-17** alloy should be cast in a Phosphate bonded investment (platinum casting investment) because of high metal temperatures involved using this alloy.

**Note: Check the recommended temperature range on your casting equipment before using this alloy as the casting temperature may be above the limits of your equipment.**

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.

|                 |                                               |                                                  |
|-----------------|-----------------------------------------------|--------------------------------------------------|
| <b>Step : 1</b> | Pre- Alloying (Fine gold + alloy) Temperature | <b>1240° - 1250° C</b><br><b>2264° - 2282° F</b> |
| <b>Step : 2</b> | Casting Temperature for 18 K Alloyed Grain    | <b>1220° - 1230° C</b><br><b>2228° - 2248° F</b> |

**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

Not recommended.

### QUENCH TIME

**20 to 25 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](mailto:doc@unitedpmr.com) Web-Site / [www.unitedpmr.com](http://www.unitedpmr.com)

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