

### Physical & Mechanical Properties

Composition		Color Coordinates				Density (g/cc)		As cast Hardness (HV)	
		Karat	L*	a*	b*				
Cu	9.80%	14K PD2	82.69	1.89	12.77	14K PD2	14.11	14K PD2 - 20 mins quench	244
Ag	53.10%					18K PD2	15.84	18K PD2 - 20 mins quench	226
Zn	8.00%								
Pd	29.10%								

### Melting & Casting Instructions

Temperatures			
	Karat	°C	°F
Pre alloying	14K - 18K	1140° - 1160° C	2084° - 2120° F
Casting	14K	1120° C - 1140° C	2048° - 2084° F
	18K	1135° C - 1155° C	2075° - 2111° F
Flask	14K - 18K	540° - 675° C	1004° - 1247° F

Quench Time	15-20 Minutes
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Remelting	50% Fresh Mix
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### General Instructions

- Very little boric acid flux is recommended. Do not use carbon flux such as soda ash, saltpeter etc. No flux needed in bottom pour automatic casting unit.
- Flouric based investment removers are the best for silicon oxide invisible coating. Use of aggressive acid causes corrosion and surface damage. United's brite cast investment removers works effectively.
- To calculate the weight of the metal needed (in grams), multiply density (gm/cc) with weight of wax (grams). Add 10% of the total weight for button.
- Platinum investment and platinum casting machine is recommended. Follow manufacturer's instruction for burnout cycle.

**Note:** There are proprietary metals in the formulation which are not included in the composition section.

**Technical Assistance:** Always available... Call 1-800-999-3463 / 1-800-999-FINE

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