

Physical & Mechanical Properties

Composition		Color Coordinates				Density (g/cc)		As cast Hardness (HV)	
		Karat	L*	a*	b*				
Cu	28.60%	18K PD11	80.31	2.09	7.4	18K PD11	15.79	18K PD11	225
Ag	1.00%								
Zn	12.00%								
Pd	58.40%								

Melting & Casting Instructions

Temperatures			
	Karat	°C	°F
Pre alloying	18K	1250° C - 1270° C	2282° F - 2318° F
Casting	18K	1150° C - 1170° C	2102° F - 2138° F
Flask	18K	540° C - 675° C	1004° F - 1247° F

Quench Time	20-25 Minutes	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.
- *Phosphate bonded* investment 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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