

### Physical & Mechanical Properties

Composition		Color Coordinates				Density (g/cc)		As cast Hardness (HV)	
		Karat	L*	a*	b*				
Cu	91.5%	18K 534	84.27	9.87	16.35	18K 534	14.99	18K 534 - 3 mins quench	245
Ag	4.5%								
Zn	4.0%								
Ni	0.0%								

### Melting & Casting Instructions

Temperatures			
	Karat	°C	°F
Pre alloying	18K	1050° - 1070° C	1922° - 1958° F
Casting	18K	970° C - 990° C	1778° - 1814° F
Flask	18K	510° - 650° C	950° - 1202° F

Quench Time	2-3 mins, button first
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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.
- *Gypsum 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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