

### Physical & Mechanical Properties

Composition		Color Coordinates				Density (g/cc)		As cast Hardness (HV)	
		Karat	L*	a*	b*				
Cu	59.00%	10K 950	85.74	0.296	9.101	10K 950	10.99	14K 950	171
Ag	0.00%					18K 950	12.54	18K 950	163
Zn	20.00%	14K 950	85.85	0.897	11.07				
Ni	21.00%								

### Melting & Casting Instructions

Temperatures				
	Karat	°C	°F	
Pre alloying	10K - 14K	1060° - 1070° C	1940° - 1958° F	
Casting	10K	1055° - 1075° C	1931° - 1967° F	
	14K	1020° - 1040° C	1868° - 1904° F	
Flask	10K - 14K	540° - 675° C	1004° - 1250° F	
Quench Time	8 - 12 Minutes		Remelting	70% Fresh Mix

### 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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