

Physical & Mechanical Properties

Composition		Color Coordinates				Density (g/cc)		As cast Hardness (HV)	
		Karat	L*	a*	b*				
Cu	55.00%	10K 900	85.3	-0.02	7.82	10K 900	11.0	10K 900	193
Ag	0.00%	14K 900	86.43	0.36	8.79	14K 900	12.55	14K 900	216
Zn	20.00%	18K 900	87.39	1.01	12.13	18K 900	14.59	18K 900	185
Ni	25.00%								

Melting & Casting Instructions

Temperatures				
	Karat	°C	°F	
Pre alloying	10K	1100° - 1120° C	2012° - 2048° F	
	14K - 18K	1050° - 1070° C	1922° - 1958° F	
Casting	10K	1095° - 1115° C	2003° - 2039° F	
	14K	995° - 1015° C	1823° - 1859° F	
	18K	985° - 1005° C	1805° - 1841° F	
Flask	9K - 18K	540° - 675° C	1004° - 1247° F	
Quench Time	20-30 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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