

Physical & Mechanical Properties

Composition		Color Coordinates				Density (g/cc)		As cast Hardness (HV)	
		Karat	L*	a*	b*				
Cu	93.00%	10K 548	86.28	9.37	15.76	10K 548	11.49	10K 548	112
Ag	4.00%	14K 548	86.28	9.27	16.07	14K 548	13.00	14K 548	140
Zn	3.00%	18K 548	83.51	9.73	17.41	18K 548	14.95	18K 548	187
Ni	0.00%								

Melting & Casting Instructions

Temperatures				
	Karat	°C	°F	
Pre alloying	9K - 18K	1050° - 1060° C	1922° - 1940° F	
Casting	10K	1035° - 1055° C	1895° - 1931° F	
	14K	995° - 1015° C	1823° - 1859° F	
	18K	975° - 995° C	1787° - 1823° F	
Flask	9K - 18K	510° - 650° C	950° - 1202° F	
Quench Time	15 Mins (9-14K), 3 mins button first (18K)		Remelting	50% 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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