

## Technical sheet - Alloy 910

Color - Medium White

Purpose - Casting

Karat - 9K - 18K

### Physical & Mechanical Properties

Composition		Color Coordinates				Density (g/cc)		As cast Hardness (HV)	
		Karat	L*	a*	b*				
Cu	59.50%	10K 910	82.61	0.82	8.84	10K 910	11.0	10K 910	175
Ag	0.00%	14K 910	86.75	0.81	8.91	14K 910	12.52	14K 910	160
Zn	22.00%	18K 910	85.43	0.24	9.44	18K 910	14.57	18K 910	204
Ni	18.50%								

### Melting & Casting Instructions

Temperatures			
	Karat	°C	°F
Pre alloying	10K - 18K	1050° - 1060° C	1922° - 1940° F
Casting	10K	1035° - 1055° C	1895° - 1931° F
	14K	1020° - 1045° C	1868° - 1904° F
	18K	990° - 1010° C	1814° - 1850° F
Flask	9K - 18K	540° - 675° C	1004° - 1247° F
Quench Time	10-12 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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