

## Technical sheet - Alloy VHF 1

Color - Light Greenish Yellow

Purpose - Casting

Karat - 9K - 14K

### Physical & Mechanical Properties

Composition		Color Coordinates				Density (g/cc)		As cast Hardness (HV)	
		Karat	L*	a*	b*	10K VHF1	11.37	10K VHF1	129
Cu	68.70%	10K VHF1	88.59	2.58	19.31	14K VHF1	12.88	14K VHF1	135
Ag	17.30%								
Zn	14.00%								
Ni	0.00%								

### Melting & Casting Instructions

Temperatures			
	Karat	°C	°F
Pre alloying	9K - 14K	1000° - 1030° C	1832° - 1886° F
Casting	10K	945° - 965° C	1732° - 1768° F
	14K	925° - 945° C	1696° - 1732° F
Flask	9K - 14K	510° - 650° C	1004° - 1202° F
Quench Time	20 - 25 Minutes	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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