

Color - Greenish Yellow

Purpose - Casting

Karat - 9K - 14K

### Physical & Mechanical Properties

Composition		Color Coordinates				Density (g/cc)		As cast Hardness (HV)	
		Karat	L*	a*	b*				
Cu	66.4%	10K VHF 10	89.77	1.75	21.27	10K VHF 10	11.35	10K VHF 10	156
Ag	18.0%					14K VHF 10	12.87	14K VHF 10	157
Zn	15.6%	14K VHF 10	89.93	2.39	19.79				
Ni	0%								

### Melting & Casting Instructions

Temperatures			
	Karat	°C	°F
Pre alloying	9K - 14K	1000° - 1030° C	1830° - 1885° F
Casting	10K	925° - 945° C	1697° - 1733° F
	14K	920° - 940° C	1688° - 1724° F
Flask	9K - 14K	510° - 650° C	950° - 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

E-mail / [techteam@unitedpmr.com](mailto:techteam@unitedpmr.com) Web-Site / [www.unitedpmr.com](http://www.unitedpmr.com)

