

### Physical & Mechanical Properties

Composition		Color Coordinates				Density (g/cc)		As cast Hardness (HV)	
		Karat	L*	a*	b*				
Cu	46.25%	18K 725	87.96	4.3	24.14	18K 725	15.39	18K 725	150
Ag	50.00%								
Zn	3.75%								
Ni	0.00%								

### Melting & Casting Instructions

Temperatures			
	Karat	°C	°F
Pre alloying	18K	1050° C - 1070° C	1922° F - 1958° F
Casting	18K	960° C - 980° C	1760° F - 1796° F
Flask	18K	510° C - 650° C	950° F - 1202° F

Quench Time	15-20 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)