

Color - Ultra White Purpose - Casting Karat - 9K - 18K

Physical & Mechanical Properties											
Composition		Color Coordinates					Density (g/cc)		As cast Hardness (HV)		
Cu	57.50%	Karat	L*	a*	b*						
Ag	6.50%	10K 974	87.08	0.525	9.77		10K 974	11.19	10K 974	200	
Zn	17.00%	14K 974	86.98	0.91	11.33		14K 974	12.72	14K 974	185	
Ni	19.00%	18K 974	87.2	1.71	14.06		18K 974	14.74	18K 974	206	
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## **Physical & Mechanical Properties**

## **Melting & Casting Instructions**

Temperatures										
	Karat	°C	°F							
Pre alloying	9К - 14К	1055° - 1065° C	1931° - 1949° F							
	10K	1020° - 1040° C	1868° - 1904° F							
Casting	14K	1015° - 1034° C	1859° - 1895° F							
	18K	980° - 1000° C	1796° - 1832° F							
Flask	9K - 18K	540° - 675° C	1004° - 1247° F							
Quench Time	15-25 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 aggresive 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.

• <u>Gypsum bonded</u> investment is recommended. Follow manufacurer'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 Web-Site / www.unitedpmr.com