

## **Technical sheet - Alloy 952**

**Color** - Ultra White **Purpose** - Casting **Karat** - 9K - 14K

## **Physical & Mechanical Properties**

Composition			
Cu	51.50%		
Ag	15.50%		
Zn	15.00%		
Ni	18.00%		

Color Coordinates				
Karat	L*	a*	b*	
10K 952	85.22	-0.178	9.180	
14K 952	86.55	0.120	11.27	

Density	Density (g/cc)		
10K 952	11.22		
14K 952	12.75		

As cast Hardness (HV)	
10K 952	194
14K 952	217

## **Melting & Casting Instructions**

Temperatures					
	Karat	°C	°F		
Pre alloying	10K - 14K	1050° - 1070° C	1922° - 1958° F		
Casting	10K	1055° - 1075° C	1931° - 1967° F		
	14K	1025° - 1045° C	1877° - 1913° F		
Flask	10K - 14K	540° - 675° C	1004° - 1247° F		
Quench Time	15 - 20 Minutes	Remelting	70% Fresh Mix		

## **General Instructions**

- Very little <u>boric acid</u> flux is recommended. Do not use carbon flux such as soda ash, saltpeter etc. No flux needed in bottom pour automatic casting unit.
- <u>Flouric based</u> investment removers are the best for silicon oxide invisible coating. Use of aggresive acid causes corrosion and surface damage. <u>United's brite cast</u> investment removers works effectively.
- To calculate the weight of the metal needed (in grams), <u>multiply density (gm/cc) with weight of wax</u> (grams). Add 10% of the total weight for button.
- Gypsum bonded 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