

Technical sheet - Alloy 982

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

Physical & Mechanical Properties

Composition		
Cu	53.0%	
Ag	20.0%	
Zn	10.0%	
Ni	17.0%	

Color Coordinates				
Karat	L*	a*	b*	
10K 982	86.16	1.226	11.29	
14K 982	87.53	1.216	11.15	
18K 982	86.86	2.18	14.69	

Density (g/cc)				
10K 982	11.51			
14K 982	13.01			
18K 982	14.97			

As cast Hardness (HV)		
10K 982	180	
14K 982	220	
18K 982	208	

Melting & Casting Instructions

Temperatures					
	Karat	°C	°F		
Pre alloying	9K - 18K	1050° - 1060° C	1922° - 1940° F		
	10K	960° - 980° C	1760° - 1796° F		
Casting	14K	985° - 1005° C	1805° - 1841° F		
	18K	980° - 1000° C	1796° - 1832° F		
Flask	9K - 18K	540° - 675° C	1004° - 1247° F		
Quench Time	15-25 Minutes	Remelting	60% 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