

Technical sheet - Alloy 940

Color - Medium White Purpose - Casting Karat - 10K - 14K

Physical & Mechanical Properties

Composition		
Cu	61.40%	
Ag	0.00%	
Zn	21.00%	
Ni	17.60%	

Color Coordinates				
Karat	L*	a*	b*	
10K 940	84.32	0.55	9.67	
14K 940	86.36	1.02	11.69	

Density	Density (g/cc)	
10K 940	11.22	
14K 940	12.74	

As cast Hardness (HV	
10K 940	142
14K 940	157

Melting & Casting Instructions

Temperatures					
	Karat	°C	°F		
Pre alloying	10K - 14K	1080° - 1090° C	1976° - 1994° F		
Castina	10K	1065° - 1085° C	1949° - 1985° F		
Casting	14K	1015° - 1035° C	1860° - 1895° F		
Flask	10K - 14K	540° - 675° C	1004° - 1247° F		
Quench Time	15 - 20 Minutes	Remelting	50% 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