

Technical sheet - Alloy 921

Color - Ultra White

Purpose - Casting

Karat - 18K

Physical & Mechanical Properties

Composition		Color Coordinates				Density (g/cc)		As cast Hardness (HV)	
		Karat	L*	a*	b*				
Cu	56.00%	18K 921	86.08	0.98	11.2	18K 921	14.75	18K 921	204
Ag	0.00%								
Zn	16.05%								
Ni	27.50%								

Melting & Casting Instructions

Temperatures			
	Karat	°C	°F
Pre alloying	18K	1130° C - 1140° C	2066° F - 2084° F
Casting	18K	1015° C - 1035° C	1859° F - 1895° F
Flask	18K	540° C - 650° C	1004° F - 1247° F

Quench Time	10 - 15 Minutes	Remelting	70% Fresh Mix
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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 Web-Site - www.unitedpmr.com