

## Technical sheet - Alloy PD20

Color - Vanilla White

Purpose - All Purpose

Karat - 14K - 18K

### Physical & Mechanical Properties

Composition		Color Coordinates				Density (g/cc)		As cast Hardness (HV)	
		Karat	L*	a*	b*				
Cu	15.20%	14K PD20	82.22	2.02	9.6	14K PD20	14.28	14K PD20	158
Ag	18.50%					18K PD20	15.6	18K PD20	137
Zn	4.30%								
Pd	32.00%								

### Melting & Casting Instructions

Temperatures			
	Karat	°C	°F
Pre alloying	14K - 18K	1190° - 2010° C	2174° - 2210° F
Casting	14K	1170° C - 1190° C	2138° - 2174° F
	18K	1185° C - 1205° C	2165° - 2201° F
Flask	14K - 18K	540° - 675° C	1004° - 1247° F

Quench Time	20-25 Minutes	Remelting	50% 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.
- Platinum investment and Platinum casting machine is recommended. Follow manufacturer's instruction for burnout cycle. Melting under Argon gas is highly recommended.

**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

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