

## **Technical sheet - Alloy 716**

Color - Italian yellow Purpose - All Purpose Karat - 18K

## **Physical & Mechanical Properties**

Composition		
Cu	47.00%	
Ag	48.00%	
Zn	5.00%	
Ni	0.00%	

Color Coordinates				
Karat	L*	a*	b*	
18K 716	88.43	4.85	23.13	

Density (g/cc)		
18K 716	15.36	

As cast Hardness (HV	)
18K 716	165

## **Melting & Casting Instructions**

Temperatures						
Karat °C °F						
Pre alloying	18K	1050° C - 1070° C	1922° F - 1958° F			
Casting	18K	965° C - 985° C	1768° F - 1805° F			
Flask	18K	510° C - 650° C	950° F - 1202° F			

	Quench Time	15-20 Minutes		Remelting	50% Fresh Mix
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## **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