

## Technical sheet - Alloy 204

Color - Standard Yellow

Purpose - Casting

Karat - 9K - 14K

### Physical & Mechanical Properties

Composition		Color Coordinates				Density (g/cc)		As cast Hardness (HV)	
		Karat	L*	a*	b*	10K 204	11.24	10K 204	120
Cu	72.5%								
Ag	10.0%								
Zn	17.5%	10K 204	90.23	1.6	20.36				
Ni	0.0%	14K 204	89.13	2.95	20.3	14K 204	12.76	14K 204	131

### Melting & Casting Instructions

Temperatures				
	Karat	°C	°F	
Pre alloying	9K - 14K	1010° - 1040° C	1850° - 1910° F	
Casting	10K	965° - 985° C	1768° - 1804° F	
	14K	940° - 960° C	1724° - 1760° F	
Flask	9K - 14K	510° - 650° C	950° - 1202° F	
Quench Time	15-20 Minutes		Remelting	35%-50% Fresh Mix

### 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

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