

## Technical sheet - Alloy 396

Color - Reddish Yellow

Purpose - Casting

Karat - 18K - 22K

### Physical & Mechanical Properties

Composition		Color Coordinates				Density (g/cc)		As cast Hardness (HV)	
		Karat	L*	a*	b*	18K 396	15.07	18K 396	188
Cu	81.0%	18K 396	85.29	8.85	18.63	22K 396	17.16	22K 396	114
Ag	17.0%								
Zn	2.0%								
Ni	0.0%								

### Melting & Casting Instructions

Temperatures				
	Karat	°C	°F	
Pre alloying	18K	1060° - 1070° C	1940° - 1958° F	
	22K	1090° - 1120° C	1994° - 2048° F	
Casting	18K	965° - 985° C	1779° - 1805° F	
	22K	1035° - 1055° C	1895° - 1931° F	
Flask	18K - 22K	510° - 675° C	950° - 1248° F	
Quench Time	15 - 20 mins (22K), 3 mins button first (18K)		Remelting	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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