Technical sheet - Alloy 790

Color - Deep yellow
Purpose - Casting
Karat - 18K

Physical & Mechanical Properties

Composition	
Cu	53.0%
Ag	44.0%
Zn	3.0%
Ni	0.0%

Color Coordinates			
Karat	**L***	**a***	**b***
18K 790	88.46	5.23	23.62

Density (g/cc)	
18K 790	15.36

As cast Hardness (HV)	
18K 790	174

Melting & Casting Instructions

Temperatures			
	Karat	**°C**	**°F**
Pre alloying	18K	1050° C - 1070° C	1922° F - 1958° F
Casting	18K	950° C - 970° C	1742° F - 1778° F
Flask	18K	510° C - 650° C	950° F - 1202° F

Quench Time	15-20 Minutes

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 aggresive 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 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
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