

Technical sheet - Alloy 780

Color - Light Greenish yellow

Purpose - Casting

Karat - 18K

Physical & Mechanical Properties

Composition		Color Coordinates				Density (g/cc)		As cast Hardness (HV)	
		Karat	L*	a*	b*				
Cu	38.0%	18K 780	89.37	2.52	25.02	18K 780	15.48	18K 780	156
Ag	60.0%								
Zn	2.0%								
Ni	0.0%								

Melting & Casting Instructions

Temperatures			
	Karat	°C	°F
Pre alloying	18K	1050° C - 1070° C	1922° F - 1958° F
Casting	18K	975° C - 995° C	1787° F - 1823° F
Flask	18K	510° C - 650° C	950° F - 1202° F

Quench Time	15-20 Minutes
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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.
- *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

E-mail / techteam@unitedpmr.com Web-Site / www.unitedpmr.com