

Technical sheet - 823

Color - Medium Yellow (9K - 14K),
Bright Yellow (18K - 22K)

Purpose - All Purpose

Karat - 9K - 22K

Physical & Mechanical Properties

Composition		Color Coordinates				Density (g/cc)		As cast Hardness (HV)	
		Karat	L*	a*	b*				
Cu	71.50%	10K 823	88.83	5.55	16.89	10K 823	11.49	10K 823	183
Ag	16.00%	14K 823	88.83	5.23	18.33	14K 823	13	14K 823	170
Zn	10.50%	18K 823	88.05	5.83	19.54	18K 823	14.95	18K 823	210
Co	2.00%	22K 823	85.08	8.58	28.13	22K 823	17.6	22K 823	127

Melting & Casting Instructions

Temperatures			
	Karat	°C	°F
Pre alloying	9K - 22K	1050° - 1100° C	1922° - 2012° F
Casting	10K	990° - 1010° C	1814° - 1850° F
	14K	960° - 980° C	1760° - 1796° F
	18K	950° - 970° C	1742° - 1778° F
	22K	1025° - 1045° C	1876° - 1912° F
Flask	9K - 23K	510° - 650° C	950° - 1202° F
Quench Time	20-25 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 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