

Technical sheet - Alloy T1

Color - Greenish Yellow

Purpose - Casting

Karat - 9K - 14K

Physical & Mechanical Properties

Composition		Color Coordinates				Density (g/cc)		As cast Hardness (HV)	
		Karat	L*	a*	b*				
Cu	70.0%	10K T1	90.63	0.68	21.43	10K T1	11.03	10K T1	111
Ag	6.0%					14K T1	12.56	14K T1	178
Zn	24.0%								
Ni	0.0%								

Melting & Casting Instructions

Temperatures			
	Karat	°C	°F
Pre alloying	10K - 14K	1010° - 1040° C	1850° - 1904° F
Casting	10K	990° - 1010° C	1814° - 1850° F
	14K	935° - 955° C	1715° - 1750° F
Flask	10K - 14K	510° - 650° C	950° - 1202° F
Quench Time	15 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

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