

## **Technical sheet - Alloy T3**

Color - Greenish Yellow Purpose - Casting Karat - 9K - 14K

## **Physical & Mechanical Properties**

Composition			
Cu	72.0%		
Ag	5.0%		
Zn	23.0%		
Ni	0.0%		

Color Coordinates			
Karat	L*	a*	b*
10K T3	90.74	0.61	20.74
14K T3	89.82	1.9	20.74

Density (g/cc)		
10K T3	11.02	
14K T3	12.56	

As cast Hardness (HV)	
10K T3	122
14K T3	134

## **Melting & Casting Instructions**

Temperatures						
	Karat	°C	°F			
Pre alloying	9K - 14K	1030° - 1065° C	1886° - 1949° F			
Casting	9K-10K	955° - 975° C	1750° - 1786° F			
	14K	935° - 955° C	1715° - 1750° F			
Flask	9K - 14K	510° - 650° C	950° - 1202° F			
Quench Time	15 Minutes	Remelting	35%-50% Fresh Mix			

## **General Instructions**

- Very little <u>boric acid</u> flux is recommended. Do not use carbon flux such as soda ash, saltpeter etc. No flux needed in bottom pour automatic casting unit.
- <u>Flouric based</u> investment removers are the best for silicon oxide invisible coating. Use of aggresive acid causes corrosion and surface damage. <u>United's brite cast</u> investment removers works effectively.
- To calculate the weight of the metal needed (in grams), <u>multiply density (gm/cc) with weight of wax</u> (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 E-mail / techteam@unitedpmr.com Web-Site / www.unitedpmr.com