

## **Technical sheet - Alloy UA2**

Color - Standard yellow Purpose - Casting Karat - 9K - 14K

## **Physical & Mechanical Properties**

Co	Composition	
Karat	67.0%	Cu
Naiat	15.0%	Ag
10K UA	18.0%	Zn
14K UA	0.0%	Ni

Color Coordinates				
Karat	L*	a*	b*	
10K UA2	87.7	3.8	21.61	
14K UA2	86.9	4.08	18.13	

Density (g/cc)		
10K UA2	11.33	
14K UA2	12.85	

As cast Hardness (HV)	
10K UA2	136
14K UA2	150

## **Melting & Casting Instructions**

Temperatures								
	Karat	°C	°F					
Pre alloying	9K - 14K	1040° - 1050° C	1904° - 1922° F					
Coating	10K	900° - 920° C	1652° - 1688° F					
Casting	14K	945° - 965° C	1733° - 1770° F					
Flask	9K - 14K	510° - 650° C	950° - 1202° F					
Quench Time	15-20 Minutes	Remelting	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