

## Technical sheet - Alloy VHF2

Color - Standard Yellow

Purpose - Casting

Karat - 9K - 14K

### Physical & Mechanical Properties

Composition		Color Coordinates				Density (g/cc)		As cast Hardness (HV)	
Cu	74.5%	Karat	L*	a*	b*	10K VHF2	11.35	10K VHF2	123
Ag	13.0%	10K VHF2	88.28	3.93	19.31	14K VHF2	12.86	14K VHF2	137
Zn	12.5%	14K VHF2	89.66	4.31	18.88				
Ni	0.0%								

### Melting & Casting Instructions

Temperatures				
	Karat	°C	°F	
Pre alloying	9K - 14K	1000° - 1030° C	1832° - 1885° F	
Casting	10K	975° - 995° C	1786° - 1822° F	
	14K	945° - 965° C	1732° - 1768° F	
Flask	9K - 14K	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](mailto:techteam@unitedpmr.com) Web-Site / [www.unitedpmr.com](http://www.unitedpmr.com)

