UNITED
PRECIOUS METAL REFINING, INC.

Technical sheet - Alloy 915

Color - Premium White
Purpose - Casting
Karat - 14K - 18K

Physical & Mechanical Properties

Composition	
Cu	49.50%
Ag	0.00%
Zn	20.00%
Ni	30.50%

Color Coordinates			
Karat	**L***	**a***	**b***
14K 915	82.19	0.88	10.42
18K 915	86.34	1.12	11.78

Density (g/cc)	
14K 915	12.57
18K 915	14.61

As cast Hardness (HV)	
14K 915	195
18K 915	231

Melting & Casting Instructions

Temperatures			
	Karat	**°C**	**°F**
Pre alloying	14K - 18K	1060° - 1070° C	1940° - 1958° F
Casting	14K	1030° - 1050° C	1886° - 1922° F
	18K	1000° - 1025° C	1841° - 1887° F
Flask	14K - 18K	540° - 675° C	1004° - 1247° F

Quench Time	15-30 Minutes	**Remelting**	70% 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 aggresive 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 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