UNITED
PRECIOUS METAL REFINING, INC.

Technical sheet - 925

Color - Medium White
Purpose - Casting
Karat - 9K - 18K

Physical & Mechanical Properties

Composition	
Cu	55.70%
Ag	0.80%
Zn	26.00%
Ni	17.50%

Color Coordinates			
Karat	L*	a*	b*
10K 925	87.2	-0.01	9.34
14K 925	87.38	0.33	11.06
18K 925	87.39	1.23	14.4

Density (g/cc)	
10K 925	10.92
14K 925	12.47
18K 925	14.53

As cast Hardness (HV)	
10K 925	144
14K 925	172
18K 925	185

Melting & Casting Instructions

Temperatures			
	Karat	°C	°F
Pre alloying	9K - 14K	1100° - 1120° C	2012° - 2048° F
	18K	1050° - 1060° C	1922° - 1940° F
Casting	10K	1090° - 1100° C	1994° - 2030° F
	14K	1005° - 1025° C	1841° - 1877° F
	18K	965° - 985° C	1769° - 1805° F
Flask	9K - 18K	540° - 675° C	1004° - 1247° F

Quench Time	10-12 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