UNITED
PRECIOUS METAL REFINING, INC.

Technical sheet - Alloy M930

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

Physical & Mechanical Properties

Composition	
Cu	57.00%
Ag	0.00%
Zn	21.00%
Ni	22.00%

Color Coordinates			
Karat	L*	a*	b*
10K M930	85.51	0.249	8.84
14K M930	86.56	0.8	10.2
18K M930	85.8	0.239	9.44

Density (g/cc)	
10K M930	10.98
14K M930	12.52
18K M930	14.57

As cast Hardness (HV)	
10K M930	174
14K M930	191
18K M930	211

Melting & Casting Instructions

Temperatures			
	Karat	°C	°F
Pre alloying	10K - 18K	1040° - 1050° C	1904° - 1922° F
Casting	10K	1060° - 1080° C	1940° - 1976° F
	14K	1025° - 1045° C	1877° - 1913° F
	18K	995° - 1015° C	1823° - 1859° F
Flask	9K - 18K	540° - 675° C	1004° - 1250° F

Quench Time	25-30 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