

Color - Russian Red

Purpose - Casting

Karat - 9K - 18K

Physical & Mechanical Properties

Composition		Color Coordinates				Density (g/cc)		As cast Hardness (HV)	
		Karat	L*	a*	b*				
Cu	75.00%	10K 520	88.19	6.95	16.19	10K 520	11.68	10K 520	145
Ag	22.00%	14K 520	87.2	7.09	17.98	14K 520	13.16	14K 520	175
Zn	3.00%	18K 520	86.86	7.76	19.52	18K 520	15.09	18K 520	191
Ni	0.00%								

Melting & Casting Instructions

Temperatures				
	Karat	°C	°F	
Pre alloying	9K - 18K	1040° - 1050° C	1904° - 1922° F	
Casting	10K	970° - 990° C	1778° - 1814° F	
	14K	945° - 965° C	1733° - 1769° F	
	18K	955° - 975° C	1751° - 1787° F	
Flask	9K - 18K	510° - 650° C	950° - 1202° F	
Quench Time	15 Mins (9-14K), 3 mins button first (18K)		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 Web-Site / www.unitedpmr.com