

Technical sheet - Alloy 540

Color - Premium pink

Purpose - Casting

Karat - 9K - 14K

Physical & Mechanical Properties

Composition		Color Coordinates				Density (g/cc)		As cast Hardness (HV)	
		Karat	L*	a*	b*				
Cu	95.0%	10K 540	86.02	9.09	15.56	10K 540	11.39	10K 540	131
Ag	3.5%					14K 540	12.9	14K 540	146
Zn	1.5%								
Ni	0.0%								

Melting & Casting Instructions

Temperatures			
	Karat	°C	°F
Pre alloying	9K - 14K	1050° - 1060° C	1922° - 1940° F
Casting	10K	1025° - 1045° C	1877° - 1913° F
	14K	990° - 1010° C	1814° - 1850° F
Flask	9K - 14K	510° - 650° C	950° - 1202° F
Quench Time	15 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

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