



Master Alloys Technical Specification

Doc No:MA/RG/07

SP909**General Purpose Alloy for 22Kt and 18Kt Rose Gold****General Information**

1	Suitable Karatage	22KT/18KT	4	Application	General Purpose/Casting
2	Color	Rose	5	Solid State Hardness After Melting	22 KT : 107HV
3	Color Shade	Pink-Yellow Hue			18KT : 175HV

Melting Parameters

	Karatage	Temperature *C	Time min.sec
1	22KT	1040	3.25
2	18KT	950	4.3

Casting Parameters

	Karatage	Melting Casting Temperature		Investment Flask Temperature	
		Temp	Quenching Time	Temp	Type of Casting
1	22KT	1050	15 minutes	600	Vacuum Casting
2	18KT	1020	15 minutes	600	Vacuum Casting

Mechanical Working Parameters

	Thickness	Temperature *C	Time	Age Hardening			
				Temp	Time	Hardness HV0.2	
Annealing	>5	500	30				
	1-5mm	500	25	22KT	300	90	N/A
	<1mm	500	20	18KT	275	90	240

Color Coordinates

22KT			18KT		
L	a	b	L	a	b
90.34	13.06	28.04	85.92	13.9	22.3

Technical Guidelines

1	For mixing, place master alloy grains under the gold in the crucible.
2	Offers excellent fluidity for casting in 18KT.
3	Upon reaching melting temperature, hold metal for few minutes and stir with graphite stirrer before pouring into mold.
4	Induction melting recommended
5	After casting, wait for 5 minutes, then quench in normal water.
6	Pickling in sulfuric acid (10% conc at 60°C for 5 min.).
7	Not suitable for age-hardening.
8	Best suited for mechanical working in 22KT.
9	Excellent shine and lusture.

Remarks: The information is for reference only. The parameters should be adjusted according to the particular casting conditions.

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