



RNA18-R

Rich Rose

Rich Pink. For 18kt Rose Gold. "Rich" is a range of master alloys for creating 18kt gold alloys, possessing rich colours that allows your jewellery to maintain the bonafide colours, without plating.

Unique Characteristics	Rich Pink
Purpose	Rich, rose 18K gold alloy
Category	Premium
Supply Forms	Pellets
Manufacturability	Casting
Patent	
Content, Wt%	Copper, Silver, Proprietary ingredients
ROHS compliance	Yes

Product Code	RNA18-R
Product Name	Rich Rose
PHYSICAL PROPERTIES	
Density, g/cm ³	17.83
Grain Size, μm	160
OPTICAL PROPERTIES	
Colour	
L*	94.56
a*	5.88
b*	30.33
THERMAL PROPERTIES	
Liquidus, °C	880
Coefficient of Thermal Expansion 10-6 / °C	
MECHANICAL PROPERTIES	
Ultimate tensile strength, Mpa	400
Elongation, %	30
Hardness, as cast, HV	108
Hardness, annealed, HV	75
Hardness, age- hardened, HV	229
Hardness, after reduction (70%	
Electrical Resistivity $\Omega\text{-m}$	
PROCESSING & TECHNICAL PROCEDURES	
General Technical Understanding	
Mixing Temperature, °C	900
Instructions/ Directions for Use	Add this master alloys in pellet form for making 75% gold alloys.. Measure 25wt% (for 18kt) of master alloys and put it at the bottom of the crucible, sprinkle some brazing flux or borax over it. Add the remaining 75 wt% of pure gold on top of the master alloy, heat to 900 °C and hold till it melts, use a graphite and stir the molten alloy to give a homogeneous mixture, then pour out.
Recycling/ Remelting	Up to 5 times investment casting process. Can be better with Vacuum Casting
Casting	
Systems Type	Any
Casting Temperature °C	900-925
Investment/Lost Wax Casting Temperature, °C	
Flask/Cylinders Preparation Temperature °C	
POST PROCESSING PROPERTIES	
Investment Removal Instructions	
Pickling	
Quenching	in water
Age Hardening	Age harden for 60 mins or after casting air cool 200 °C
WORKING PROPERTIES	
<i>Sheet Rolling</i>	
Pouring Temperature	900
Maximum Reduction,%	60
<i>Wire-Drawing</i>	
Pouring Temperature	900
Maximum Reduction,%	60
Soldering	As per normal methods
Flux	
Weldability	
Finishing Properties	
Tumbling	As per normal methods
Polishing	
Plating	

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