



GNA-F

Flexi Green

Emerald green gold alloys For 9-18kt gold alloys.

Unique Characteristics	Flexible 9-18kt use
Purpose	Versatility for manufacturing 9-18K Emerald Green Gold Alloys
Category	
Supply Forms	Pellets
Manufacturability	Casting/Sheet Production/ Wire-Drawing
Patent	0
Content, Wt%	Copper, Silver & Proprietary Ingredients
ROHS compliance	Yes

Product Code	GNA-F
Product Name	Flexi Green
PHYSICAL PROPERTIES	
Density, g/cm ³	17.83
Grain Size, μm	160
OPTICAL PROPERTIES	
Colour	
L*	85.36
a*	5.64
b*	20.32
THERMAL PROPERTIES	
Liquidus, °C	880
MECHANICAL PROPERTIES	
Ultimate tensile strength, Mpa	566
Elongation, %	44
Hardness, as cast, HV	100
Hardness, annealed, HV	80
Hardness, age- hardened, HV	220
PROCESSING & TECHNICAL PROCEDURES	
General Technical Understanding	0
Mixing Temperature, °C	
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	Preferable inert or vacuum
Casting Temperature °C	900-950
Investment/Lost Wax Casting Temperature, °C	0
Flask/Cylinders Preparation Temperature °C	500
POST PROCESSING PROPERTIES	
Investment Removal Instructions	soak in hot water
Pickling	Most standard investment removers will successfully remove the investment powder. The best solutions are the sulfuric and hydrofluoric based products. It is better not to use acid solutions, which do not contain sulfur. You can use citric acid at 10%-15% At 60°C changing the solution frequently.
Quenching	0
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	As per normal methods
Plating	As per normal methods

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