

<b>PRODUCT CODE</b>	<b>SY 2022 C</b>
<b>FINENESS</b>	<b>875 (21K)</b>
<b>COLOR</b>	<b>YELLOW</b>



### Brief description

Master alloy for yellow gold 21 and 22K. The formulation of SY 2022 C makes it suitable for casting applications, with or without stones in place. The colour obtained with SY 2022 C is a deep yellow shade. This alloy is not suitable for age hardening. This alloy contains nickel.

### Suitable applications

Plates&Sheets	Solid Chains	Hollow Chains	Soldered Tubes	CNC Works	Open Casting	Closed Casting	Wax Setting
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				

### Proprieties

<b>Silver Quantity</b>	11%	Amount of silver contained in the alloy (%)
<b>Density</b>	16.5	(g/cm <sup>3</sup> )
<b>Melting Range</b>	895-925	Solidus - Liquidus (°C)
<b>Hardness</b>	115-/	Annealed - Hardened (HV)

### Mould casting

Put first the alloy in the crucible and cover it with pure gold. Heat the metal 50-100°C more than Liquidus temperature, while protecting the melting with a reducing flame or keeping it in protective atmosphere. Heat the mould at 150-200°C and, when the melting temperature is reached, stir the metal and pour it in the mould; after casting, open the mould and cool the metal immediately.

### Continuous casting

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### Mechanical work

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### Annealing

Heat the metal in protective atmosphere at 620°C for 10-30min (depending on the quantity), then quickly cool it in a solution of 90% water and 10% alcohol or in warm water (≈40°C).

### Hardening

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### Casting

Flasks' temperature should be between 500-700°C, based on casted items' size and models' intricacy. It is preferable to pre-melt the alloy with gold before casting. Casting temperature is 50-100°C higher than the liquidus temperature. After casting wait 15-20 min before cooling the metal in warm water (≈40°C). In case of casting with stones, wait 30-45 min.

### Pickling

Sulfuric acid (H<sub>2</sub>SO<sub>4</sub>) at 15-30% concentration and 50-60°C can be used to remove surface oxide. Rinse with attention the metal after pickling.

### Scraps reuse

Up to 50% scraps can be added to the melting, removal of sprue button is suggested. Always pay attention to the cleanliness of the scraps, de-greasing and pickling before adding them to new metal is suggested.

<b>PRODUCT CODE</b>	<b>SY 2022 C</b>
<b>FINENESS</b>	<b>917 (22K)</b>
<b>COLOR</b>	<b>YELLOW</b>



### Brief description

Master alloy for yellow gold 21 and 22K. The formulation of SY 2022 C makes it suitable for casting applications, with or without stones in place. The colour obtained with SY 2022 C is a deep yellow shade. This alloy is not suitable for age hardening. This alloy contains nickel.

### Suitable applications

Plates&Sheets	Solid Chains	Hollow Chains	Soldered Tubes	CNC Works	Open Casting	Closed Casting	Wax Setting
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				

### Proprieties

<b>Silver Quantity</b>	11%	Amount of silver contained in the alloy (%)
<b>Density</b>	17.8	(g/cm <sup>3</sup> )
<b>Melting Range</b>	910-950	Solidus - Liquidus (°C)
<b>Hardness</b>	80-/	Annealed - Hardened (HV)

### Mould casting

Put first the alloy in the crucible and cover it with pure gold. Heat the metal 50-100°C more than Liquidus temperature, while protecting the melting with a reducing flame or keeping it in protective atmosphere. Heat the mould at 150-200°C and, when the melting temperature is reached, stir the metal and pour it in the mould; after casting, open the mould and cool the metal immediately.

### Continuous casting

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### Mechanical work

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### Annealing

Heat the metal in protective atmosphere at 640°C for 10-30min (depending on the quantity), then quickly cool it in a solution of 90% water and 10% alcohol or in warm water (≈40°C).

### Hardening

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### Casting

Flasks' temperature should be between 500-700°C, based on casted items' size and models' intricacy. It is preferable to pre-melt the alloy with gold before casting. Casting temperature is 50-100°C higher than the liquidus temperature. After casting wait 15-20 min before cooling the metal in warm water (≈40°C). In case of casting with stones, wait 30-45 min.

### Pickling

Sulfuric acid (H<sub>2</sub>SO<sub>4</sub>) at 10% concentration and 50-60°C can be used to remove surface oxide. Rinse with attention the metal after pickling.

### Scraps reuse

Up to 50% scraps can be added to the melting, removal of sprue button is suggested. Always pay attention to the cleanliness of the scraps, de-greasing and pickling before adding them to new metal is suggested.