

PRODUCT CODE	SY 14 CLG
FINENESS	375 (9K)
COLOR	GREEN YELLOW



Brief description

Master alloy for 9, 10 and 14K yellow gold casting. Gold produced with SY14 CLG has a green-yellow shade. This alloy is suitable for casting in open and closed systems, with or without wax settings of stones. Gold produced with SY14 CLG is not suitable for age hardening.

Suitable applications

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

Proprieties

Silver Quantity	4%	Amount of silver <u>contained</u> in the alloy (%)
Density	10.8	(g/cm ³)
Melting Range	865-915	Solidus - Liquidus (°C)
Hardness	85-/-	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 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

When using a continuous casting machine, it is preferable to pre-melt gold and alloy. Alloyed gold can then be poured in a mould or in water and re-melted in the continuous casting machine, or poured directly in the machine's crucible, heating it until it reaches alloy's liquidus temperature. Always protect the melting using a reducing flame over the molten metal. Machine's speed should be as high as possible.

Mechanical work

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Annealing

Heat the metal in protective atmosphere at 690°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 (H₂SO₄) 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. Always pay attention to the cleanliness of the scraps, de-greasing and pickling before adding them to new metal is suggested.

PRODUCT CODE	SY 14 CLG
FINENESS	417 (10K)
COLOR	GREEN YELLOW



Brief description

Master alloy for 9, 10 and 14K yellow gold casting. Gold produced with SY14 CLG has a green-yellow shade. This alloy is suitable for casting in open and closed systems, with or without wax settings of stones. Gold produced with SY14 CLG is not suitable for age hardening.

Suitable applications

Plates&Sheets	Solid Chains	Hollow Chains	Soldered Tubes	CNC Works	Open Casting	Closed Casting	Wax Setting
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Proprieties

Silver Quantity	4%	Amount of silver contained in the alloy (%)
Density	11.1	(g/cm ³)
Melting Range	820-890	Solidus - Liquidus (°C)
Hardness	100-/	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 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

When using a continuous casting machine, it is preferable to pre-melt gold and alloy. Alloyed gold can then be poured in a mould or in water and re-melted in the continuous casting machine, or poured directly in the machine's crucible, heating it until it reaches alloy's liquidus temperature. Always protect the melting using a reducing flame over the molten metal. Machine's speed should be as high as possible.

Mechanical work

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Annealing

Heat the metal in protective atmosphere at 650°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 (H₂SO₄) 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. Always pay attention to the cleanliness of the scraps, de-greasing and pickling before adding them to new metal is suggested.

PRODUCT CODE	SY 14 CLG
FINENESS	585 (14K)
COLOR	GREEN YELLOW



Brief description

Master alloy for 9, 10 and 14K yellow gold casting. Gold produced with SY14 CLG has a green-yellow shade. This alloy is suitable for casting in open and closed systems, with or without wax settings of stones. Gold produced with SY14 CLG is not suitable for age hardening.

Suitable applications

Plates&Sheets	Solid Chains	Hollow Chains	Soldered Tubes	CNC Works	Open Casting	Closed Casting	Wax Setting
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Proprieties

Silver Quantity	4%	Amount of silver contained in the alloy (%)
Density	12.6	(g/cm ³)
Melting Range	850-885	Solidus - Liquidus (°C)
Hardness	115-130	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 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

When using a continuous casting machine, it is preferable to pre-melt gold and alloy. Alloyed gold can then be poured in a mould or in water and re-melted in the continuous casting machine, or poured directly in the machine's crucible, heating it until it reaches alloy's liquidus temperature. Always protect the melting using a reducing flame over the molten metal. Machine's speed should be as high as possible.

Mechanical work

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Annealing

Heat the metal in protective atmosphere at 680°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 (H₂SO₄) 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. Always pay attention to the cleanliness of the scraps, de-greasing and pickling before adding them to new metal is suggested.