



# TIFOO

## GOLD ELECTROLYTE - CHAMAELEON

# MANUAL

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### Security

This electrolyte contains gold in form of small amounts of potassium dicyanoaurat. That's why you should always handle it carefully. Avoid at any cost that the electrolyte gets in contact with strong acids because this can provoke the release of toxic hydrocyanic acid. Avoid skin contact (wear gloves); the ingestion of bigger amounts is dangerous and you should consult immediately a doctor. Please read all of the indications on the receptacle's label.

### Application field of the gold electrolyte CHAMAELEON

The gold electrolyte CHAMAELEON is an all-rounder. It offers easy application, a low price and a gleaming gold deposition for thin layers. Furthermore, the electrolyte is compatible with all of our gold colour admixtures. The colour can be customized with them. This allows you to have pink gold, red gold, white gold, pale and full yellow gold, as well as grey gold. Without the admixtures, the deposit will deposit 24 carats of fine gold. Unlike the gold electrolytes FLASH and MIDAS, it is no hard gilding, but with the admixtures you can get to have hard gilding. It's not possible to use this gold electrolyte for pen plating (for it is very slow), but it is perfect for immersion plating.

#### **Suitable material for gilding:**

Ideally, you should prime the objects with nickel or palladium; on copper, brass, bronze, silver and nickel silver, it works directly.

**Unsuitable material:** aluminium, titanium, zinc, tungsten, stainless steel (-> gild the object before with a thin layer with the gold electrolyte FLASH)

### Indications for coloured gold mixing

The electrolyte can be mixed with the following products:

- (A): Tifoo Red gold additive
- (B): Tifoo Silver gel
- (C): Tifoo Palladium electrolyte

Tried and tested mixtures are:

Golden yellow: (A)	50 mL Gold electrolyte + 0,25 mL (B) + 2 drops
Weak rose yellow gold: (A)	50 mL Gold electrolyte + 1,0 mL (B) + 0,75 mL
Rose gold:	50 mL Gold electrolyte + 1,0 mL (B) + 1,25 mL (A)

Any other combination is possible, component (C) can be used for removing colour or for achieving brighter colours.

## Tank plating

The electrolyte deposits gleaming gold layers in the immersion bath. You should work with a current density of 0.3 amperes per square decimetre on the workpiece. This current density is normally achieved with a voltage of 3 volts. The anode material: stainless steel. In addition to gold, hydrogen will also be created (gas bubbles), which is very common for the electrolyte and doesn't have any effect on the quality.

### Important specifications:

**pH-value:** ~ 7 - 8

**Current density in the immersion bath:** 0.3 A/dm<sup>2</sup>

**Gold content:** 1 g / l

**Growth of layer thickness:** 12 µm / heure (avec 0.3 A/dm<sup>2</sup>)

**Don't mix with any acid or gold electrolyte FLASH!**

Only use unused interchangeable pens or swabs.

## Promotion

Our company is officially sponsored by the European Union.



## European Union

European Regional  
Development Fund

**TIFOO - a brand of**

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