



Nickel-Free™

Bright Mirror Nickel-Free Plate (Mirror)

Product Description:

Nickel-Free™ is a bright nickel-free plating solution which is used as a hard, wear resistant, white flash plate over many different metals. The solution is easy to control due to a superb combination of brighteners which provide excellent coverage and leveling ability.

Nickel-Free™ offers an easily maintainable alternative to nickel plating baths while depositing a nickel-free Hypo-Allergenic surface.

Nickel-Free™ is supplied as ready to use, for ease of set-up and trouble free operation.

Applications:

Use to plate over gold, copper, brass, nickel, nickel-free, sterling silver, and most other similar metals for nickel free results.

Cautions: Read all safety information before using this product

1. Use only with proper ventilation.
2. Wear gloves, safety goggles, apron.
3. Avoid contact with eyes and skin.

Operating Conditions:

Temperature	130-150°F (49° - 65°C)
Current Density	2-3 Volts (10-20 ASF)
PH	4
Beaker	Pyrex
Anodes	Platinized Titanium

Bath Set Up:

1. Fill beaker with **Nickel-Free™** and heat to 140°F.
2. Check connections from rectifier to anode and work, be sure the negative (-) and positive (+) wires are connected properly. The work should be charged negative (-), and the anode positive (+). Turn rectifier on.
3. Plate for 2-5 minutes at 2-3 volts depending on size of part and degree of shine desired.
4. Larger parts require slightly higher voltage, while smaller parts require lower voltage. If part shows any burning such as dark grey or rough deposits around the edges, you are burning the part and must lower the voltage. If part is not shiny after 5 minutes of plating, voltage is too low, then increase voltage slightly.
5. After plating rinse part thoroughly in water and continue plating process with a **Decorative** finish such as gold or silver.
6. If you are not going to continue the plating process immediately, then dry the part thoroughly. When you continue the plating process, re-activate the part in **Activator-T™** for 3-5 minutes to assure better adhesion.

Trouble Shooting:

Pieces not Plating	\$	Check power supply, make sure switch is on.
	\$	If switch is on, check fuse.
	\$	Check connections from power supply to anode or cathode (part).
Pieces turn dark gray, or black	\$	Rectifier connections are reversed.
	\$	Current is too high.
Pieces turn hazy, cloudy, and too dull	\$	Current too low. Raise current.
	\$	Plate for a longer time.
	\$	Organics are too high. Solution is used up- discard.

Discard and Replace:

Nickel-Free™ is a rugged bath and guidelines have been provided to help assure the long life of this bath. If, however, a problem should arise that cannot be solved by any of the above recommendations, or recommendations by our or any other qualified laboratory, the bath may need to be replaced: Transfer to a DOT approved container. Check with local authorities for proper disposal.