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# ARGUNA® 630

## FINE SILVER ELECTROLYTE



### For Deposition of Bright Silver Layers

ARGUNA® 630 is an alkaline-cyanide silver electrolyte for (electro) technical and decorative applications. Depending on the operating parameters chosen, the electrolyte can be used in reel-to-reel plating as well as for rack and barrel plating.

Since thick and bright silver layers can be deposited from ARGUNA® 630, it is suitable for decorative purposes. In the technical field, the main focus clearly is on the very good electrical properties and the excellent bonding and soldering characteristics of the silver layers.

Due to a reflection density of up to 1.5 GAM and the high temperature resistance of the coatings, the electrolyte can also be used for final finishes on LEDs.



### Advantages

- For (electro)technical and decorative applications
- Suitable for rack and barrel plating
- Bright and thick layers can be deposited
- Operating temperature up to 40 °C possible
- Transparent colour of the electrolyte
- Can be used in reel-to-reel plating using flow or spray technologies for either all-over or selective silver plating of strip materials
- Excellent soldering and bonding properties
- High temperature resistance of the layers
- Reflection density of the coatings of up to 1.5 GAM possible
- Can be used as LED final finish

### Applications

- Contact surfaces of electrical and electronic components
- Coated wires as high-quality conducting material for medical technology and aerospace industry
- LED final finish

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### TECHNICAL SPECIFICATIONS

| Electrolyte characteristics  |                               |
|--|-------------------------------|
| Electrolyte type   | Alkaline-cyanide              |
| Metal content  | 30 - 60 g/l Ag                |
| NaCN content   | 130 (110 - 140) g/l           |
| pH value   | 12.5                          |
| Operating temperature  | 25 - 40 °C                    |
| Current density range  |                               |
| Rack operation   | 0.5 - 5 A/dm <sup>2</sup>     |
| Barrel operation   | 0.5 - 2 A/dm <sup>2</sup>     |
| Reel-to-reel plating   | 10 - 40 A/dm <sup>2</sup>     |
| Plating speed  |                               |
| Rack operation at 1 A/dm <sup>2</sup>                                      | 1 µm in 1.5 min               |
| Rack operation at 5 A/dm <sup>2</sup>                                      | 1 µm in 0.3 min               |
| Reel-to-reel plating at 20 A/dm <sup>2</sup>                               | 13 µm in 1 min                |
| Anode material (fine silver, as Ag granules in titanium baskets or sheets) | Pt-Ti (type PLATINODE® Pt/Ti) |

| Coating characteristics                                  |                           |
|--|---------------------------|
| Coating  | Fine silver               |
| Purity   | 99.9 wt.% Ag              |
| Colour of deposit  | White                     |
| Brightness   | Bright                    |
| Hardness of deposit<br>HV 0.015 (Vickers) approx. values | 100 - 130 HV<br>as plated |
| Max. coating thickness                                   | > 100 µm                  |
| Density of the coating                                   | 10.5 g/cm <sup>3</sup>    |

### YOUR CONTACT

Do you have a specific question or would you like a no-obligation quote calculation? Our specialist will be happy to help you with any technical questions you might have.



Markus Legeler  
Manager Sales International

Mail: markus.legeler@eu.umicore.com  
Phone: +49 (0) 7171 607 - 204

