

NiKlad™ ELV 812

Electroless Nickel Coatings

NiKlad ELV 812 Is A Unique Lead-And Cadmium-Free Ternary Alloy Ni-Sn-P

MacDermid NiKlad ELV 812 is a ternary alloy high phosphorus nickel alloy coating system developed specifically to enable metal finishers and design engineers to exceed existing performance standards.

NiKlad ELV 812 eliminates lead and cadmium which historically has been used as stabilizers and brighteners in EN coatings but still operates in a similar fashion to a conventional EN. The deposit is semi-bright and produces excellent quality, highly corrosion resistant deposits at a deposition rate of 6-9 microns per hour. NiKlad ELV 812 meets strict performance specifications outlined in a range of recently enacted regulations, including ELV (End of Life Vehicle), WEEE (Waste Electrical and Electronic Equipment), RoHS (Restriction of Hazardous Substances) and others from major automotive manufacturers and OEM's.

For high phosphorus EN coatings, count on MacDermid.



Key Features

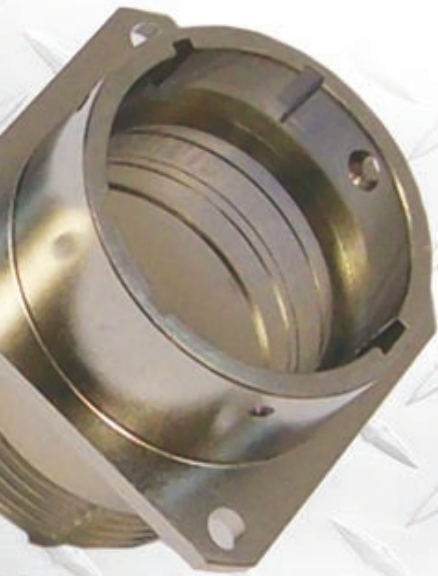
- Ternary Alloy deposit offering outstanding performance
- Operates in the same way as conventional EN systems
- Deposition rate of 6-9 microns per hour
- Outstanding stability, works well in polypropylene and stainless steel tanks and equipment
- Deposit provides excellent corrosion protection to ferrous and aluminum alloys

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MacDermid ELV's Meet Your Needs

MacDermid offers a full line of lead-and cadmium-free electroless nickel coating systems under the name NiKlad ELV. Together, they provide enhanced uniform deposits, predictable plating rates and exceptional corrosion resistance that cover the conventional range of electroless deposits. This includes low, medium, high, nickel boron as composite technology.



NiKlad 812 Deposit Properties

Density Range (g/cm ³)	7.7 - 7.9
Phosphorus Content (% by weight)	9 - 11
Melting Range (°C)	880 - 980
Deposit Hardness: (KNOOP & Rockwell C)	475 - 550HK ₁₀₀ 42 - 47 Rc (on plated) 850 - 950HK ₁₀₀ 62 - 67Rc (heat treated @ 360°C for 1 hour)
Wear Resistance Taber Wear Index: (CS - 10, 1000g)	18 - 22/1000 cycles (as plated) 14 - 17/1000 cycles (heat treated @ 360°C for 1 hour)
Magnetic Tendency	Non Magnetic (as plated)
Electrical Resistivity (μΩcm)	15 - 45
Salt Spray (per ASTM B117 - 25.4 MΩ deposit)	>1000hrs*
Nitric Acid Test (Concentrated nitric for 30 seconds)	Pass

*Dependant upon substrate condition

It takes more than innovative, high performance products and superior technical service to help our customers compete and win in today's global marketplace. It takes a total commitment to understanding their needs and the ability to provide the right solutions—every time.

When success is your only goal, trust MacDermid.



For more information, please contact us at:

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