

# NiKlad™ ELV 809

## Electroless Nickel Coatings

### The Lead-And Cadmium-Free MEDIUM Phosphorus Ni-P Alloy

**MacDermid NiKlad ELV 809** is the environmentally compliant medium phosphorus nickel alloy coating system developed specifically to enable metal finishers and design engineers to conform to recycling initiatives.

**NiKlad ELV 809** eliminates lead and cadmium from being used as stabilizers and brighteners in EN coatings and is a three component system that operates in a similar fashion as a conventional EN. It provides a bright deposit with fast deposition rate, is an exceptional production tool for deposits up to 15 microns thick and utilizes a production proven process for ferrous and aluminum substrates. NiKlad ELV 809 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 Substance) and others from major automotive manufacturers and OEM's.

For environmentally compliant medium phosphorus EN coatings, count on the company that says "Yes We Can." MacDermid.

#### Key Features

- Lead-and cadmium-free chemistry for better recycling capability
- Operates in the same way as conventional EN systems
- Excellent deposition rates for high production throughput
- Production proven process for ferrous and aluminum substrates
- Outstanding stability also works well in polypropylene and stainless steel tanks and equipment
- Deposit provides good protection and water resistance



YES WE CAN<sup>SM</sup>

 **MacDermid**  
Industrial Solutions

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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, predicable plating rates and exceptional corrosion resistance that cover the conventional range of deposits 7-9% nickel phosphorus. Additionally, NiKlad ELV systems run in existing, standard equipment with no loss of performance compared to conventional systems.

### NiKlad 809 Deposit Properties

<b>Density Range</b> (g/cm <sup>3</sup> )	8.0–8.2
<b>Phosphorus Content</b> (% by weight)	7.5–9.0
<b>Melting Range</b> (°C)	880–980
<b>Deposit Hardness:</b> (KNOOP & Rockwell C)	550–650 HK <sub>100</sub> 47–53 Rc (as plated) 850–950 HK <sub>100</sub> 65–72 Rc (heat treated @ 400 °C for 1 hour)
<b>Wear Resistance Taber Wear Index:</b> (CS-10, 1000 g)	16–20 mg/ 1000 cycles (as plated) 9–12 mg/ 1000 cycles (heat treated @ 400 °C for 1 hour)
<b>Magnetic Tendency</b>	Slightly magnetic (as plated)
<b>Electrical Resistivity</b> (μΩ cm)	40–70
<b>Salt Spray</b> (per ASTM B117 – 25.4 μm deposit)	> 96 hours
<b>Nitric Acid Test</b> (Concentrated nitric for 30 seconds)	Fail

**YES WE CAN**<sup>SM</sup>

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 the company that says "Yes We Can."



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