

## 1. Description

High purity Nickel Acetate is used widely to seal anodic coatings on aluminum. The sealing process consists of immersing the anodized aluminum in a boiling nickel acetate solution. When sealing with nickel acetate alone, a smutty deposit will form on the work. This can be prevented by the addition of a wetting agent such as Specialty Dispersant. Nickel acetate is suitable for sealing dyed or clear anodized aluminum. Nickel acetate offers the advantage of increased weather and light fastness on coatings dyed with organic dyes.

#### 2. Suggest formulation

Nickel Acetate:	4-5 g/l
Specialty Dispersant:	2-3 g/l
Benzoic Acid:	1-2 g/l

### 3. Application instructions

pH:	5.2 - 5.9
Temperature:	200-210°F
Seal time:	10-25 minutes

#### 4. Conditions for using Nickel Acetate

Tank:	Stainless steel or other acid resistant material that that can withstand a constant operating temperature of 210°F.
	Separate seal tanks for clear and dyed work.
Water quality:	Deionized
pH adjustments:	Lower with acetic acid. Raise with dilute ammonium hydroxide.
	pH should be checked once per shift with a calibrated meter.
Rinse:	Before sealing, a thorough rinse is necessary to remove any foreign substances. After sealing, the work load should be thoroughly rinsed at once before it is dried.
Filtration:	Field experience has shown that continuous filtration through a 5-35 micron filter is beneficial. <b>Do not use a carbon filter.</b>
Sealing time:	2-3 minutes per 0.10 mil. oxide coating thickness.

## 5. Titration procedure

Reagents:	Concentrated ammonium hydroxide Murexide indicator 0.1 M EDTA
Procedure:	<ol> <li>Pipette 25-ml of working solution into 250 ml flask.</li> <li>Add 200-ml deionized water.</li> <li>Add 10-ml of concentrated ammonium hydroxide</li> <li>Add 0.1 gram murexide indicator</li> <li>Titrate with 0.1 M EDTA to a blue/violet endpoint.</li> </ol>
Calculation:	ml of 0.1 M EDTA x 1.01 = g/l of Nickel Acetate

# 6. Packaging

100#

# 7. Storage

Shelf life, 1 year from date of purchase. Store in original container in a cool dry location. In humid environments, powder may harden.

# 8. Product safety

We recommend that the company/operator read and review the **M**aterial **S**afety **D**ata **S**heet for the appropriate health and safety warnings before use.

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