



Specialty Sealant

High Temperature Seal

1. Description

Specialty Sealant is a fully blended nickel acetate, specifically formulated to provide a high-quality seal for dyed anodized aluminum.

- Compatible with all aluminum dyes, no matter the source.
- Excellent corrosion protection.
- pH regulated.
- Contains a smut suppressant.
- Suitable to seal clear anodize, hardcoat and electrolytic colored work.
- Meets current ASTM test methods: B136, B680, B117
- RoHS compliant
- REACH compliant

2. Application instructions

Concentration:	8-10 g/l
pH:	5.2-5.9
Temperature:	190-210°F
Seal time:	10-25 minutes

3. Conditions for using Specialty Sealant

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.
Agitation:	Mild agitation to maintain a uniform solution temperature if operating on the lower end of the temperature range.
Filtration:	Field experience has shown that continuous filtration through a 5-35 micron filter is beneficial. Do not use a carbon filter.
Sealing time:	2-3 minutes per 0.10 mil. oxide coating thickness.
Rinsing-before seal:	Two rinses, bottom fed at overflow.
Rinsing-after seal:	Final rinse with good quality or deionized water at over flow.
Smut suppressant:	Specialty Dispersant can be added to the bath to delay the onset of seal smut.

4. Solution makeup

1. Fill the tank $\frac{3}{4}$ full of deionized water.
2. Adjust the pH to 5.2-5.5 with acetic acid.
3. Add the required amount of Specialty Sealant and mix thoroughly.
4. Fill the tank to its final volume with more deionized water.
5. Heat to operating temperature.
6. Measure pH again and adjust if necessary.

5. Titration procedure

Reagents: Concentrated ammonium hydroxide (28-30%)
Murexide indicator
0.1 M EDTA

Procedure: 1. Take a 25-ml cooled sample of working solution into 400 ml beaker.
2. Add 200-ml of water.
3. Add 10-ml ammonium hydroxide
4. Add a pinch of murexide indicator.
5. Titrate with 0.1 M EDTA until there is a permanent and distinct purple endpoint.

Calculation: g/l of Specialty Sealant = ml of 0.1 M EDTA x 1.5

6. Packaging

5 lb. MOQ

7. Storage

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 **Safety Data Sheet** for the appropriate health and safety warnings before use.

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