



## ANODAL® DEOX CR #1

**Anodal Deox CR #1** is an iron-free desmut / deoxidizer that is highly effective for most aluminum alloys. Its function is to remove the natural oxide film together with the smut formed by alkaline etching. Anodal Deox CR #1 is particularly well suited for conversion coating lines that use iron sensitive tri-chrome processes. Regular analysis and additions of this product are required to achieve peak performance.

### **PHYSICAL PROPERTIES:**

Appearance: White powder

### **APPLICATION DETAILS:**

Materials of construction: 316SS, plastic-lined (PVC or rubber) tank  
Initial make-up: 5-10 volume % nitric or sulfuric acid  
1-2 ounces per gallon Anodal Deox CR #1  
Operating temperature: Ambient  
Immersion time: 30 seconds - 5 minutes  
Ventilation: Not required  
Agitation: Continuous air agitation best

### **ANALYTICAL PROCEDURE (DEOX CR#1):**

1. Pipette a 5 ml sample into a suitable flask and add 100 ml of deionized water.
2. Add 5 ml 50 weight % sulfuric acid.
3. Add 4 grams potassium iodide and mix for 30 minutes.
4. Titrate with 0.1 N sodium thiosulfate to a "straw" color.
5. Add about 3 ml starch indicator.

***Note: Solution should turn blue upon adding the starch indicator. If not, final endpoint has been exceeded. Begin test again.***

6. Continue titrating to a clear endpoint.

Calculation: **Sodium thiosulfate (ml) x 0.27 = oz/gal Deox CR #1**

### **ANALYTICAL PROCEDURE (ACID):**

1. Pipette a 5 ml sample into a suitable flask and add 100 ml of deionized water.
2. Add 4 drops methyl orange Indicator.
3. Titrate with 1 N NaOH to a yellow endpoint.

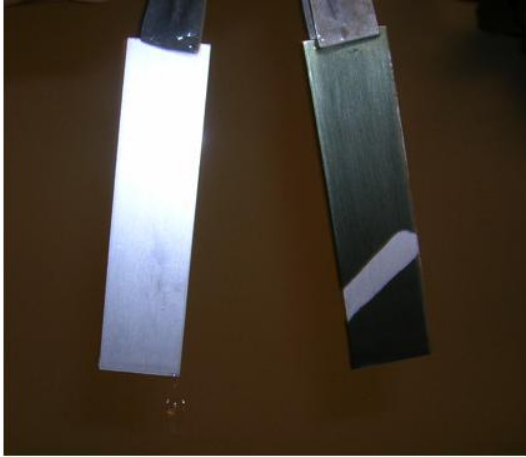
Calculation: **NaOH (ml) x 1.3 = % vol nitric acid**  
**NaOH (ml) x 0.6 = % vol sulfuric acid**

### **HANDLING PRECAUTIONS:**

Operating baths of should be handled with precautions appropriate for nitric acid. These baths also contain fluoride, which contributes to the corrosive nature of the solution. Eye protection, rubber gloves and protective clothing should be used when dealing with this product in solution form. For further information refer to the MSDS.

## ANODAL® DEOX CR #1

The part on the right was de-smutted in 5% nitric acid. The part on the left was given an identical treatment with 1 oz/gal Anodal Deox CR #1 added. Excellent results were also found with AA6061



AA2024



AA7075

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