

# DEOX CR #1

## Aluminum Desmutter & Deoxidizer Additive

**Deox CR #1** is a desmutter and deoxidizer suitable for most aluminum alloys. Its function is to remove the natural oxide film together with the smut formed by alkaline etching.

The use of a **Deox CR #1** bath will produce a "white" surface which will greatly improve the quality and appearance of subsequent anodic films.

### PHYSICAL PROPERTIES:

Appearance:

White powder

### APPLICATION:

Materials of construction:

316SS, plastic-lined (PVC or rubber) tank

Initial make-up:

5-10 volume % nitric acid

1-2 ounces per gallon Deox CR #1

Operating temperature:

ambient

Immersion time:

30 seconds - 5 minutes (depending on nature and degree of soil)

Ventilation:

not required

Agitation:

continuous air agitation for optimum performance

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

1. Pipette a 5 mls sample into a suitable flask and add 100 mls of deionized water.
2. Add 5 mls 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 3 mls 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.
7. Calculation:  $\text{ml of 0.1 N sodium thiosulfate} \times 0.265 = \text{o/g Deox CR \#1}$

### ANALYTICAL PROCEDURE (NITRIC ACID):

1. Pipette a 5 mls sample into a suitable flask and add 100 mls of deionized water.
2. Add 4 drops methyl orange Indicator.
3. Titrate with 1 N sodium hydroxide to a yellow endpoint.
4. Calculation:  $\text{ml of 1 N sodium hydroxide} \times 1.4 = \text{volume \% nitric acid}$

### PRECAUTIONS:

Operating baths of **Deox CR #1** 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 M.S.D.S.

### NON-WARRANTY:

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