



# Deoxidizer 23

Deoxidizer 23 is an acidic liquid, non-chromated, water soluble product for deoxidizing-de-smutting wrought aluminum alloys and cast alloys with a low silicon content (less than 1%).

Deoxidizer 23 may be used in rack, barrel lines or spray operations prior to either spot welding, conversion coating, bright dipping, anodizing, or plating.

The function of Deoxidizer 23, besides deoxidizing and de-smutting, is also to inhibit the reformation of the natural oxide film on the aluminum surface between operations.

## Features & Benefits

Non-fuming	Safer work environment
Highly concentrated	Smaller inventory footprint
Rapid de-smutting	Higher productivity
No organic compounds	Low BOD, COD loading to WWT; lower cost
Non-chelated no phosphate	Simpler WWT; lower cost

## Operating Conditions

Concentration	8% – 20% (vol); heavier smuts may require higher concentrations
Temperature	Ambient – 100°F
Time	1 – 8 min depending upon smut buildup
Equipment	300 series stainless, PVC, Polypropylene, or rubber lined tank. Fiberglass or 200 and 400 series stainless steel must not be used.
Agitation	Air or work agitation is suggested to decrease smut



	removal time.
Ventilation	Required

## Titration Method

1. Pipette a 10 mL sample of Deoxidizer 23 solution into a 250 mL Erlenmeyer flask.
2. Dilute with 50 mL of water.
3. Add 2 grams of Sodium Citrate - swirl flask to thoroughly mix.
4. Add 4 to 5 drops of Phenolphthalein indicator.
5. Titrate with 1.0 N Sodium Hydroxide until the solution becomes red - must persist for at least 30 seconds.
6. Record mL used.

Calculation

$$\text{Concentration} = \text{mL } 1.0 \text{ N NaOH} \times 1.4$$

## Waste Disposal

Discharge to a disposal system. In order to be completely informed on the latest regulations for your area, please contact the local authorities.

## Caution

Deoxidizer 23 is a strongly acidic product containing fluoride and should be handled accordingly. Contact with skin or eyes may cause irritation or burns. The same safety precautions should be observed as when handling acid fluoride products. Personnel should wear eye protection, NIOSH approved air mask, rubber gloves and apron or other protective clothing when working with Deoxidizer 23.



**WARRANTY:** HUBBARD-HALL INC. IS NOT RESPONSIBLE FOR THE MISUSE, MISAPPLICATION, OR MISHANDLING OF THIS PRODUCT. SEE THE TERMS AND CONDITIONS OF SALE ON OUR WEBSITE FOR ADDITIONAL TERMS AND CONDITIONS CONCERNING OUR PRODUCTS, INCLUDING BUT NOT LIMITED TO, LIMITATIONS AND DISCLAIMERS OF WARRANTIES AND LIABILITIES.

---

## Our People. Your Problem Solvers.

For more information on this process,  
please call us at 203.756.5521 or email: [techservice@hubbardhall.com](mailto:techservice@hubbardhall.com)

Hubbard-Hall holds certifications for **ISO 9001:2015**, Responsible Distribution, as accredited by the **ACD** (Alliance for Chemical Distributors) and as a **Women-Owned Small Business**, as well as maintaining an association with **Omni-Chem**<sup>136</sup>.