



# Technical Process Bulletin

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ALODINE® 1000 RTU  
 Chromate Conversion Coating for Aluminum

1. Introduction:

ALODINE 1000 RTU is a ready to use aqueous solution for producing a protective coating on aluminum and its alloys. Light coatings do not significantly change the appearance of the aluminum surface. The coating provides excellent protection for painted and unpainted aluminum and bonds paint well.

ALODINE 1000 RTU coating chemical is applied using an acid-resistant brush, a swab, a synthetic sponge, or portable low pressure spray equipment - e.g. a paint spray gun, or garden sprayer. ALODINE 1000 RTU is specifically designed for touching-up abraded or damaged areas on work previously treated with ALODINE coating chemicals.

2. Operating Summary:

<u>Chemical:</u> ALODINE 1000 RTU	<u>Bath Preparation per 100 Gallons:</u> Used as received
<u>Operation and Control:</u> Apply the coating chemical as suggested above.	
Time:	1 to 3 minutes
Temperature:	Ambient

3. The Process:

The complete process normally consists of the following steps:

- A. Cleaning
- B. Rinsing
- C. Treating with the ALODINE 1000 RTU processing solution
- D. Rinsing
- E. Drying

The work, after drying, is ready for use either painted or unpainted.

#### 4. Materials:

Ridoline® Cleaner  
ALODINE 1000 RTU

#### 5. Equipment:

Acid-resistant (rubber, stainless steel, or plastic) buckets, troughs, or other suitable containers are used to hold the coating chemical solution. Lead, glass, tin or galvanized iron should not be used. Storing the solution in mild steel containers will result in the decomposition of the solution and is not recommended.

NOTE: ALODINE 1000 RTU saturated rags, sponges, swabs, etc., should be thoroughly washed with water before allowing to dry or discarding. Otherwise, they may constitute a fire hazard.

#### 6. Surface Preparation:

##### Cleaning

All metal to be treated with the processing solution must be free from grease, oil and other foreign material before treatment. A complete line of cleaners is available. Our representative will recommend the proper cleaner.

##### Water Rinsing

After cleaning, the metal must be thoroughly rinsed with water or wiped off with clean, water-damp cloths prior to coating with ALODINE 1000 RTU coating chemical.

#### 7. Treating with the ALODINE 1000 RTU Processing Solution:

Apply the coating chemical solution liberally to the aluminum surface. Treat only as large an area at one time as can be conveniently handled with the equipment being used (approximately 6 to 10 square feet of surface).

Use as many applications as necessary to get the coating desired, allowing approximately one minute reaction time before the application and before the final water rinsing. The color of the coating will range from clear to a light iridescent gold color depending on the aluminum alloy, temperature and number of applications.

##### Operation

Time: 1 to 3 minutes  
Temperature: Ambient

#### 8. After Treatment:

##### Rinsing and Drying

Excess coating chemical solution should be removed by either of the following methods:

1. Flush the work thoroughly with clean water followed by (a) air drying; (b) blowing dry with compressed air; (c) warm or hot air drying; or (d) wiping dry with clean cloths.
2. Wipe with water-damp cloths followed by wiping dry with clean cloths.

Any seams, joints and crevices should be blown dry with clean, dry, compressed air and the moisture splatters wiped dry with clean rags.

9. Storage Requirements:

This chemical should be stored indoors away from alkaline and organic materials. The freezing point of ALODINE 1000 RTU is 30° Fahrenheit.

10. Waste Disposal Information:

Applicable regulations covering disposal and discharge of chemical should be consulted and followed.

Disposal information is given on the Material Safety Data Sheet for the product.

The solution is acidic and contains hexavalent chromium and fluoride. Waste treatment and neutralization may be required prior to discharge.

11. Precautionary Information:

When handling the chemical products used in this process, the first aid and handling recommendations on the Material Safety Data Sheet should be read, understood and followed.

The product when used as supplied contains chromic acid in excess of 0.1 percent. The following statement, or one similar to it, should be included as part of the process tank labeling [29 CFR 1910.1200 (f) (4)].

"POSSIBLE CANCER HAZARD, CONTAINS CHROMIC ACID WHICH MAY CAUSE CANCER BASED ON ANIMAL DATA. Risk of cancer depends on duration and level of exposure."

Refer to the Material Safety Data Sheet for additional information.

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