



# Technical Process Bulletin

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ALODINE® 600-RTU

## 1. Introduction:

ALODINE 600-RTU is a ready to use liquid product which produces a chromate conversion coating on aluminum and its alloys. The coating produced provides excellent protection for unpainted aluminum and bonds paint well.

## 2. Operating Summary:

<u>Chemical:</u> ALODINE 600-RTU	<u>Bath Preparation per 100 Gallons:</u> Used as received without dilution
<u>Operation and Control:</u>	
Time:	1 - 5 minutes
Temperature:	70° to 100° Fahrenheit

## 3. The Process:

The complete process normally consists of the following steps:

- A. Cleaning
- B. Rinsing
- C. Treating with the ALODINE 600-RTU processing solution
- D. Rinsing
- E. Drying

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

## 4. Material:

ALODINE 600-RTU

## 5. Equipment:

The work is processed in conventional spray processing equipment. The equipment for the ALODINE coating chemical should be constructed of stainless steel (Type 316 preferred for weldability) or other suitable acid-resistant material, but no lead or glass.

All heated tanks should be equipped with steam plate coils and side heating (preferred for a more even temperature distribution) or other heat sources capable of heating the bath to the specified temperature.

Acid-resistant crates, baskets, tumbling barrels, or conveyors, etc., should be provided to carry the work through the various stages.

NOTE: Detailed equipment specifications for a particular processing line should be obtained from your technical representative.

#### 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 for your processing needs.

##### Water Rinsing:

After cleaning, the metal must be thoroughly rinsed with water. The rinse should be overflowed continuously at a rate which will keep it clean and free from scum and contamination.

#### 7. Treating with the ALODINE 600-RTU Processing Solution:

Each alloy reacts with the ALODINE 600-RTU conversion chemical bath to produce a coating that is characteristic of that alloy. For the treating time selected, the bath should produce a light iridescent gold to tan coating on aluminum.

The data contained herein are normal for most installations; however, your technical representative may suggest a deviation from this data if indicated by production conditions.

If the ALODINE coating is powdery, the cause may be one or more of the following:

1. The work has been improperly cleaned and/or rinsed.
2. The coating time is too long.
3. The bath temperature is too high.

If the ALODINE coating is too light, the cause may be one or more of the following:

1. The treating time is too short.
2. The temperature of the bath is below the specified range.

##### Operation:

Time: 15 to 30 seconds.  
Temperature: 70° to 100° Fahrenheit.

#### 8. After Treatment:

##### Rinsing and Drying:

Unreacted coating chemical should be removed by one 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. Do not allow ALODINE 600-RTU to freeze. Do not store with chlorine containing materials.

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 this product.

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

11. Precautionary Information:

The following precautions should be observed during the operation of the ALODINE 600-RTU coating chemical process.

Adequate ventilation should be provided for the ALODINE processing area. Operators must not breathe ALODINE coating chemical vapors. Store open containers in a well ventilated area. Keep containers closed when not in use.

Operators should be equipped with rubber gloves and aprons. When handling ALODINE 600-RTU coating chemical, operators should use, in addition, respirators and face shields.

Any ALODINE coating chemical should be immediately flushed from the skin and clothing with water.

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.

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