



- B. Water rinsing
- C. Apply ALODINE 1001
- D. Water rinsing
- F. Drying

The process for polished aluminum where a minimal metal etch is desired normally consists of the following steps:

- A. Cleaning (METALPREP 79, Technical Process Bulletin No. 1119)
- B. Water rinsing
- C. Apply ALODINE 1001
- D. Water rinsing
- F. Drying

The work, after processing and drying, is ready to be painted.

#### 4. Materials:

ALODINE 1001  
ALUMIPREP® 33, or  
METALPREP® 79

#### 5. Equipment:

Acid resisting (rubber, stainless steel or plastic) buckets, troughs or other suitable containers should be used to hold the ALODINE 1001 or diluted ALODINE 1001 solution. Steel and galvanized containers should not be used. If production conditions warrant, troughs may be installed to collect the ALODINE 1001 coating chemical run-off for reuse.

Long handled, window type brushes, clean cloths or synthetic sponges may be used to brush on the ALODINE 1001.

#### 6. Surface Preparation:

##### Cleaning:

ALUMIPREP 33 or METALPREP 79 are recommended for cleaning.

ALUMIPREP 33 is a phosphoric acid based cleaner which produces a chemically clean and corrosion free aluminum surface. Instructions for use of ALUMIPREP 33 are found in Technical Process Bulletin No. 1146.

METALPREP 79 is a multi-purpose phosphoric acid based cleaner, for most metals, which leaves the surface chemically clean and corrosion free. Instructions for use of METALPREP 79 are found in Technical Process Bulletin No. 1119.

##### Water Rinsing:

After cleaning, the metal must be thoroughly rinsed with water. Inadequate rinsing may contaminate an ALODINE 1001 immersion bath or result in a surface condition which may cause corrosion of the finished part.

#### 7. Applying ALODINE 1001:

##### Buildup:

For brush application, ALODINE 1001 is one part with one part water.

For immersion application, ALODINE 1001 is diluted by mixing 25 parts of ALODINE 1001 a 75 parts of water for each 100 parts of bath volume required.

NOTE: Operators should be equipped with rubber gloves, aprons and goggles to avoid contact with the solution. Adequate ventilation should be provided.

Operation:

Time: 2 minutes to 5 minutes.

Temperature: room temperature to 100° Fahrenheit.

ALODINE 1001 coating chemical should not be allowed to dry on the metal surface. With brush application the surface should be rewet with fresh ALODINE 1001 several times during the treatment time. If drying does occur, rewet with ALODINE 1001 coating solution prior to water rinsing.

Selecting the size of the area to be treated at one time depends on the method of application, condition of the metal surface, method in which the surface was cleaned, temperature and part configuration.

Powdering of a chrome conversion coating can result from poor cleaning, drying, over reacting, or for other reasons. Powder can affect paint adhesion. Gently wipe and remove the powder, without abrading the chemical coating, with a dry, clean rag after t work has dried. Caution should be taken not to redeposit oils, lint or other soils bac on the aluminum surface.

8. After Treatment:

Water Rinsing:

A thorough rinse with clean water is necessary to remove residual ALODINE 1001 coating chemical salts from the metal surface. Blistering and corrosion problems under paint a often the results of poor rinsing. Chemical salts trapped under a paint film will eventually result in blistering or corrosion problems.

Drying:

As an aid to drying, heating the treated part, blowing off with clean, dry, filtered, forced air or gently wiping with a dry, clean rag will lessen the time required. Do no allow the aluminum metal temperature to exceed 140 Fahrenheit.

Paint soon after the work is dry in order to prevent soils or oxidation from recontaminating the prepared metal surface.

9. Storage Requirements:

ALODINE 1001 coating chemical will freeze at 32° Fahrenheit. It is recommended that th product be stored where freezing will not occur. However, should it freeze, simply thaw it in a warm place and stir it prior to use.

10. Waste Disposal Information:

Applicable regulations concerning disposal and discharge of chemicals should be consult and followed.

Disposal information for the chemical products used in this process is given on the Material Safety Data Sheet for each product.

The processing bath is acidic and contains hexavalent chromium. Waste treatment and neutralization may be required prior to discharge to sewer.

11. Precaution:

Consult the appropriate Material Safety Data Sheets for safety and handling guidelines for the products listed in this bulletin.

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