



Surface Technologies

BRUSH ALODINE 600

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PRODUCT DATA SHEET

1. PRODUCT DESCRIPTION

A moderated process which forms a protective golden coloured conversion coating on aluminium and its alloys.

2. FEATURES

Excellent corrosion resistance

Brush Alodine 600 gives excellent protection against corrosion to both painted and unpainted aluminium surfaces.

Flexible adherent coating

Brush Alodine 600 coatings are integral with the metal and will withstand bending and deformation of the surface.

Maximum paint adhesion

Brush Alodine 600 provides an excellent foundation for paint.

Simple to apply

Brush Alodine 600 requires no expensive equipment or skilled labour; it can be applied by brush or swab.

Approvals

Brush Alodine 600 will meet the requirements of DEF-STAN 03-18, Certificate No. 031801 (including special approval for repairing damaged anodic coating) for use on aircraft, and is approved by MIL-C-5541. Brush Alodine 600 is specified for repairs on Boeing series 700 aircraft.

3. USES

The Brush Alodine 600 process is designed for treating aluminium and aluminium alloy surfaces which are too large for normal dip or spray washing plant treatment, or for use where production does not justify the installation of expensive equipment. It is also used as a filming treatment

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over aged anodised or Alodine / Alodine treated surfaces prior to painting as specified in DTD 902E, and for touching up damaged areas on such coatings.

4. PROCESS

4.1 Solution Make-up

Brush Alodine 600 is supplied ready for use, as a single component chemical.

4.2 Precleaning

Remove oil, grease, oxide coatings, corrosion products, etc with Deoxidine 624 as described in the Product Data Sheet, or by solvent wiping followed by rubbing with Scotchbrite* pads. If the surface is oxide free thorough solvent wiping is usually satisfactory provided the Brush Alodine 600 wets the surface when it is applied.

Where Brush Alodine 600 is to be used for touching up machined, abraded or damaged areas on anodised or Alodine treated surfaces, clean the areas by solvent wiping.

4.3 Alodine Treatment

Apply the Brush Alodine 600 to the surface by brush or swab. Do not apply by spray-gun or any equipment which atomises the solution into the atmosphere.

* Scotchbrite is manufactured by 3M company.

Always apply evenly and liberally, working upwards on vertical surfaces. The best method is to use a nylon brush, but large paint brushes are also suitable and satisfactory results can be obtained with a viscose sponge or cotton rags* soaked in the solution. Vertical surfaces can also be treated by applying absorbent paper* soaked in the Brush Alodine 600 solution, this is particularly useful where only a specific area needs treating.

Treat small areas at a time, making sure that the area being treated is uniformly wetted and apply fresh solution if necessary. If there is poor wetting or bare areas remaining after treatment, then the precleaning was inadequate and some oxide is probably still present. Reclean such surfaces with Deoxidine 624 or Scotchbrite and treat again with Brush Alodine 600.

Allow the Brush Alodine 600 to act on the surface until an iridescent golden to golden yellow coating is obtained. This will take 3-6 minutes depending on the activity and temperature of the surface.

* See Section 6 for precautions to be observed when using these materials.

4.4 Rinsing

Remove excess Alodine from the surface by flushing with clean water or gently swabbing with a soft sponge or cloth. Rinse finally with demineralised water wherever possible.

4.5 Drying

Air dry, blow with clean compressed air or gently wipe with clean cloths. Oven drying for approximately 10 minutes at 120°C is beneficial if 2-pack Epoxy Primer is subsequently applied.

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NOTE: The freshly formed Brush Alodine 600 coating is quite soft and care must be taken not to damage it during rinsing and drying. When dry, Alodine treated parts may be painted or put into service without further treatment. There is no time limit before which paint must be applied, but if parts are to be painted this should be done as soon as possible to minimise contamination.

5. EQUIPMENT

Containers for the Alodine solution should be made of stainless steel, plastic, synthetic rubber or other acid resistant material; lead, glass, tin and galvanised iron are not suitable.

6. HAZARDS AND HANDLING PRECAUTIONS

Brush Alodine 600 contains chromic acid, nitric acid and complex fluoride.

When handling and applying Brush Alodine 600 wear PVC or rubber gloves, apron and rubber boots. Wear chemical goggles and/or a face shield to BS 2092. Handle and use only in conditions of good ventilation.

Avoid splashes. If Alodine solution gets on to the skin, immediately drench with water and continue washing with soap and water. Get medical attention if irritation or a skin rash develops.

If Alodine is splashed in the eyes flush with large amounts of cool water and continue irrigation for at least 10 minutes and **GET MEDICAL ATTENTION IMMEDIATELY.**

Do not allow rags, sponges or any organic material (eg. paper or sawdust) which are wet with Alodine to dry out as they may then constitute a fire hazard. Wash rags etc. in water immediately after contamination and discard them into a non-flammable container.

Hose any spills of Alodine to drain with plenty of water. **DO NOT USE SAWDUST** to absorb the liquid.

Store the Brush Alodine 600 in a cool, dry, well ventilated area away from foodstuffs, oxidisable, organic or flammable materials.

7. FURTHER INFORMATION

Full information on the hazards and safe handling of the product as supplied is given in the Health & Safety Data Sheet which must be read and understood by everyone handling or using this product.

The details given in this data sheet reflect our current technical knowledge and experience, and are not a legally binding assurance of characteristics or suitability for a specific purpose. Users must satisfy themselves that there are no circumstances requiring additional information or safety precautions relating to details given herein and must not practise or use any patented invention or trademark without prior approval.

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This information is based on our current level of knowledge. It is given in a good faith but it is not intended to guarantee any particular properties. The users must satisfy themselves that there are no circumstances requiring additional information or precautions or the verification of details given herein.

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