

Technical Information Bulletin

TURCO FORM MASK 551 LA-2

TEMPORARY PROTECTIVE COATING

DESCRIPTION:

TURCO Form Mask 551 LA-2 is a blue hand strippable coating formulated to provide protection to metal surfaces during successive fabrication operations, such as forming, chemical milling, chemical cleaning, conversion coating, type I and type II anodising and adhesive bonding

It is applied by hot airless spray methods, but can also be applied by dip and flow coating applications and can be used on ferrous and non-ferrous alloys.

TURCO Form Mask 551 LA-2 resists emulsion cleaners, acid deoxidisers, strong caustic solutions (at 120°C), anodising solutions, alkaline cleaners and various plating solutions.

BENEFITS

TURCO Form Mask 551 LA-2 offers these benefits:

Its thixotropic properties make it possible to apply thick coatings with few applications. Usually 2 to 3 applications will permit to obtain a film thickness of 250-350 micrometer.

It has a good stability and minimizes the risk of split out of the chemicals. It allows long periods between mixing.

Minimizes the over spray and dust into the spray booth.

PHYSICO CHEMICAL PROPERTIES:

LIQUID:

Appearance	: Viscous blue liquid
Odour	: Toluene
Specific Gravity	: 0,98 kg/l
Viscosity (20°C)	: 34+/- 4 sec in Zahncup N°5
Boiling point	: 110°C
Flash point	: 2°C
Solid content (by weight)	: 31,0 +/- 0,3 %
Shelf life	: 2 year

DRY FILM:

Appearance	: Hard flexible and blue polymeric coating resistant to chemical and abrasive severe conditions
Film thickness after 2-3 applications	: 250-350 micrometer
Adhesion before chemical milling*	: 100-200 g/cm
Adhesion after chemical milling*	: < 150 g/cm
Elongation	: 650+/- 50%
Tensile strength	: 1000 psi min.
Resistance to abrasion	: Excellent
Resistance to impact	: Excellent
Chemical resistance	: Resists to detergents, anodising solutions, alkaline cleaners, acidic deoxidising and chemical milling solutions (up to 120°C) Does not resist to solvents

* Depending on the pre-treatment of the substrate

INSTRUCTIONS

Pre-cleaning:

The parts to be coated must be dry clean, free of corrosion, dirt, oil and grease. Your HST sales Engineer can recommend suitable pre-cleaners based on your requirements.

Spray application:

2.1. Equipment: Hot airless spray equipment such as Graco, Nordson or Brinks may be used.

Example: Graco President 30:1 circulating unit with two 4 KW Spee-Flo heaters in series. Graco reflex gun with Graco 163-919 or -817 spray-tip alternatively a Spee-Flo gun can be used with 702-218 or -188 can be used. Further adequate compressed air volume at 6-8 bar is required for the pump set back pressure at 125-165 bar and the heater thermostat at 60-90°C.

2.2. Application Procedure: Hold the spray gun approximately 300-400 mm from the substrate moving the gun parallel and at right angles to the substrate surface. Use uniform straight strokes. Apply three box coats of which the first one is a little thinner with an over lap of 50-75%. The thickness will depend on the speed at which the spray gun is moved. Approximately 600-900 micrometer of wet film equates 200-300 micrometer dry film.

2.3. Cold Airless Spray: TURCO Form Mask 551 LA-2 may be sprayed cold. However 5 box coats may be required to obtain the same dry film thickness.

Hot spray allows application of heavier wet films without sagging than can be obtained with cold spray.

2.4. Dilution: TURCO Form Mask 551 LA-2 is packaged ready to use. However, if thinning is required use TUCO Form Mask 551 LA-2 Thinner. Thinning with other materials may result in undesirable performance, characteristics and/or make TURCO Form Mask 551 LA-2 non compliant with air quality regulations. To assure uniform and reproducible results adequate mixing of the products is necessary and should be done at least once per 8-hour shift.

Curing:

Air cure schedule: After the final coat of maskant is tack-free allow the film to dry for four hours minimum before etching

Oven cure schedule: Tack-free maskant may be oven cured for thirty minutes at 70-90°C to speed up the curing cycle.

Removal: TURCO Form Mask 551 LA-2 is hand peelable.

HAZARDOUS PROPERTIES

Keep away from flames and other ignition sources, such as sparks and welding or cutting torches.

Open containers carefully to avoid spurling. Keep containers closed when not in use.

For maximum life containers should be stored below 50°C

Refer to TURCO MATERIAL SAFETY DATA SHEET for additional safety information.

NOTICE:

The above information and recommendations concerning this product are based upon our laboratory tests and field use experience with this or similar products. However, since conditions of actual use are beyond our control, any recommendations or suggestions are made without warranty, express or implied. Manufacturer's and seller's sole obligation shall be to replace that portion of the product shown to be defective. Neither shall be liable for any loss, damage, or injury, direct or consequential, arising out of the use of this product.

Hj/200509