

## TURCO<sup>®</sup> 5580-G

### HAND PEELABLE COATING

#### DESCRIPTION:

TURCO 5580-G is a green hand-strippable coating formulated to provide protection to metal surfaces during successive fabrication operations, such as forming, chemical cleaning, conversion coating, Type I and Type II anodising, adhesive bonding and machining. It is applied by hot airless spray methods and can be used on ferrous and nonferrous alloys. It meets the requirements of Boeing Specification BMS 10-65 and Douglas DPS 4.50-139, System 3 (DPM 5252). It is non-photochemically reactive per South Coast Air Quality Control District Rule 102 and Bay Area Regulation #3. TURCO 5580-G resists emulsion cleaners, anodising solutions, alkaline cleaners, acid deoxidisers, strong caustic solutions (at 120°C) and various plating solutions.

#### PROPERTIES:

##### LIQUID:

Weight per gallon	12.1 ± 0.1 lbs
Solids, % by weight	12.5 ± 0.5 (18.7 ± 0.5 % by vol.)
Coverage (sq. ft./gal./1 mil dry film)	300
Flash point, Pensky Martens Method	Over 110°C
Viscosity, #5 Zahn Cup	20 ± 3 seconds

**NOTE:** TURCO 5580-G may revert to a soft gel on standing. This will in no way impair its performance. Simply mix well before using.

##### DRY FILM:

Peel adhesion, lbs/in. width	0.8 ± 0.2 (solvent wiped 2024 clad)
Tensile strength, psi minimum	1200
Elongation, % minimum	500%
Abrasion resistance	Excellent
Impact resistance	Excellent
Salt spray resistance	168 hours

## INSTRUCTIONS FOR USE OF TURCO 5580-G:

1. **Pre-cleaning:** The parts to be coated must be dry and clean, free of corrosion, dirt, oil and grease. Your TURCO Sales Engineer can recommend suitable pre-cleaners based on your requirements.
2. **SPRAY APPLICATION:**
  - 2.1. **Equipment:** Hot Airless Spray equipment such as Graco Nordson or Binks may be used. Example: Graco President or Bulldog 30:1 circulating unit with Stainless Steel Heater #523. A Graco Reflex Gun for hand spray fitted with a Graco tip filter assembly, #210-624, with a #250-264 filter element, #163-919 or 163-919 or 163-921 spray tips for large parts, 163-515 for small parts. Adequate compressed air volume at 80 to 100 psi is required for the pump. Set "back pressure" at 1800 to 2100 psi and the heater thermostat at 70° to 80°C.
  - 2.2. **Application Procedure:** Hold the spray gun approximately 12 to 15 inches from the work surface moving the gun parallel and at right angles to the work surface. Use straight uniform strokes. Apply one fast half (1/2) box coat, i.e. one horizontal pass overlapping about 50 to 75%. Then spray full box coat (one horizontal pass and one vertical pass) overlapping approximately 50%. This will provide a 6 to 10-mil dry film depending on the speed at which the spray gun is moved. Approximately a 16 to 25-mil wet film equates to a 6 to 10-mil dry film.
  - 2.3. **Cold Airless Spray:** TURCO 5580-G may be sprayed cold. However, 5 box coats may be required to obtain the same dry film thickness as 1 1/2 to 2 box coats when applied hot. Hot spray allows application of heavier wet films without sagging than can be obtained with cold spray.
  - 2.4. **Dilution:** TURCO 5580-G is packaged ready for use. However, if thinning is required, use TURCOFORM MASK THINNER #4. Thinning with other materials may result in undesirable performance characteristics and/or make TURCO 5580-G non-compliant with air quality regulations. Zahn cup viscosity readings of TURCO 5580-G may be misleading and are not recommended for control of TURCO 5580-G. To assure uniform and reproducible results, adequate mixing of the product is necessary and should be done at least once per 8-hour shift.
3. **CURING:** Allow the coating to dry overnight (ca. 16 hours) at room temperature before processing. To accelerate the cure, allow drying 4 hours at room temperature, then oven cure for 1 hour at 70° to 80°C. (As a stop-off for plating or anodising, optimum results are obtained by additional cure of 30 to 40 minutes at 120°C.)
4. **REMOVAL:** TURCO 5580-G is hand peelable. However, on rough and oxidized surfaces, the adhesion will be higher than normal. TURCO 5580-G may be stripped by immersing coated parts in TURCOFORM DEMASK 625 for 10 to 20 minutes followed by air-drying for 10 to 30 minutes. This lowers the adhesion of TURCO 5580-G so that it is easily removed from very thin or fragile parts.

## DISPOSAL INFORMATION:

Dispose of spent material per local, state and regional regulations. Refer to TURCO MATERIAL SAFETY DATA SHEET for additional disposal information.

## **WARNING!**

### ***Causes skin irritation, may cause eye irritation.***

TURCO 5580-G contains chlorinated solvents. Avoid contact with eyes, skin and clothing. Do not take internally. Avoid prolonged breathing of vapours. Use with adequate (equivalent to outdoor) ventilation. Protective clothing, such as a chemical face shield or goggles, gloves, boots and apron made from solvent resistant materials should be worn when using this product.

Do not use 1,1,1-trichloroethane, methylene chloride, perchloroethylene, or other halogenated solvents or solvent mixture containing halogenated solvents with pressurizable fluid handling equipment such as airless spray equipment containing aluminium or galvanized wetted parts. Direct contact between aluminium or galvanized metal and these or other chlorinated solvents could result in an uncontrollable chemical reaction and possible explosion.

Keep away from flames or other ignition sources, such as welding arcs or cutting torches, since hazardous gases may be formed.

Before using this product refer to container label and TURCO MATERIAL SAFETY DATA SHEET for additional precautionary, handling and first aid 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.*

Rev.9/99(Sup.3/89)