
Product Name:**CHEMICAL RESISTANT INTUMESCENT PAINT**

Product Number:**IP 1897 kit (parts A & B)**

Product Description:

A two pack, spray or brush applied, air drying or force dry intumescent coating for application to aircraft, turbine components and other products made from GRP, titanium, aluminium, polyurethane foam, or other substrates to protect from the effects of fire. The coating thickness can be as little as 1/10th of alternative coatings. Designed to be a more resistant and adhesive coat after being burned, to resist high air movement over the intumescent coating. Supplied for use either brushing or spraying. Used on parts and sub-assemblies of Airbus for doors of the A320 and A340 aircraft; on Eurocopter EC135, plus many parts of Rolls Royce engines including composites and control boxes.

Approvals/Specifications:

BSX 37

Goodrich/Aero Engine Controls spec 1897 Complies with FAA 5-minute fire resistance test, and 15 minute FAA fireproof test.
Resistance is film thickness dependent

Performance:

With stands 180°C (360°F) 100 hours, and humidity when air dried and sealed for one week or force cured 30 minutes at 125°C (255°F) and sealed

Formulated to work at -70°C

3 Hours at 70°C Skydrol resistant – Pass

Adhesion X Hatch - Pass

Withstands 1100°C burner test for 5 minutes when film thickness is at least 300 microns

Typical performance is demonstrated as follows:

Two 0.6² metre panels of 4 mm anodised aluminium, one coated with IP1897 using the described method and the other left uncoated. Both are pressurised to 5 p.s.i. An S.A.E. 15-cm diameter propane burner (116350 BTU) is positioned 10 cm from the centre of each panel.

Effect of Heating

1 Minute
2 Minutes
formed and holds to

2 Minutes +
5 Minutes

Non-Coated Panel

Panel distorted outwards
Deterioration rapidly increasing

Explosion, panel split centre blown out
Panel completely melted

Coated Panel

Panel intact
Intumescent paint barrier
substrate
No change
Condition satisfactory internal
maintained

Components:

Two component product, mix 8:1 by volume with catalyst IP1897B

Thinner - 665-550-025, IP9064-THIN, IP985-REDUCER

Application:

Ensure that surfaces are clean and dirt free. Dependent upon substrate, apply primer coat or sealer coat:

- Metals: Apply 1 coat IP9064-6362 chromate primer or IP9064-6500 chrome free primer.
- Composites: Apply 1 coat IP2439 green tinted sealer for composites
- Alternative Primers may be used by Approval with IP Technical

Paint Preparation:

Stir thoroughly before use.

Mix in the ratio 8 parts by volume base IP1897A to 1 part by volume catalyst IP1897B. Allow 15 minutes induction time and re-stir before use. Mixed material can be applied at this viscosity; can be thinned as required with 665-550-025 thinners to a maximum of 15% by volume.

Application Method:

Spray; compliant gun technology recommended. Refer to gun manufacturers data regarding atomising pressures etc.

1. Apply 2 cross coats; allow to flash off for 30-40 minutes, then apply further 2 cross coats
2. Allow to air dry for minimum 16 hours or allow 40 minutes flash off then force cure for 90 minutes @ 80°C
3. Repeat states 1 and 2 to achieve required film thickness. Once the film thickness is achieved, allow the coating a minimum of 16-24 hours air drying or force cure for 90 minutes @ 80°C, or 30 minutes @ 125°C before over-coating.

4. Apply 1 coat IP9064 quality epoxy, IP3 Low VOC epoxy or IP6 quality polyurethane finish, dependent upon end usage of component.

Drying Curing:

Refer to drying/curing details in application method

Air Dry:

- *Touch Dry:* minimum 40 minutes
- *Through Dry:* minimum 16-24 hours

Heat Cure:

- *Flash off:* 40 minutes
- *Force Cure:* 90 minutes @ 80°C, or 30 minutes @ 125°C

Technical Properties:

Supply Viscosity:	Ready for use when mixed
VOC Content:	Refer to SDS
Colour:	White
Pack Size:	5 litre
Density:	Refer to SDS – section 9
Gloss:	MAtt
Thinner:	665-550-025
Solvent/Clean Up:	40006 Gun Wash
Catalyst:	IP1897B

Storage:

Highly flammable liquid: store and use in accordance with the flammable liquid regulations

Shelf Life: 12 months temperate; 6 months tropical

Before use, refer to Product Safety Data Sheet

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Safety Data Sheets:

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