

# TautFlex Air



## Keeping Airbrushing Simple

### Introduction

TautFlex Air has now been on the market for over 10 years. It is well accepted in the market because of its adhesion to many substrates, fast drying, versatility, gloss level, colour range, minimal tip clogging and being waterbased offers health and safety advantages.

It was originally developed for the sign industry to airbrush onto vinyl banners and onto self adhesive vinyl for decals. The advent of the digital printer has reduced the need for this in the sign industry but for the true airbrush artist it is still being used in many applications.

This brochure gives some technical advice and airbrushing tips. If you need to contact us call Viponds Customer service on (03) 93504188 or visit our website [www.viponds.com.au](http://www.viponds.com.au) and submit questions over the internet.

# Keeping Airbrushing Simple

Most of the airbrush paints on the market are specific to the substrate or need additives to make them adhere and dry. On the other hand,

**TautFlex Air** is versatile and simple to use.

**TautFlex Air** is ready to use on most flexible and rigid surfaces. It dries quickly and is completely waterproof. No need to heat set onto fabrics. It can be coated with TautFlex Air UV clear for added protection or coated with two pack solvent clears to obtain an automotive type finish.

**TautFlex Air** is waterbased which means easy cleaning, non hazardous and safer to use.

## TautFlex and TautFlex Air

**TautFlex Air** is formulated for airbrushing and is available in 250 ml easy pour bottles.

**TautFlex** is thicker and is formulated for brushing and rolling, but can be sprayed after thinning. It is available in 4 litre, 1 litre and 500 ml cans.

## Colour Range

### Opaque

**TautFlex Air** is available in 14 stock colours plus black and white. These use light fast pigments and have excellent opacity. All colours can be intermixed in any proportion to extend the colour range.

### Transparent

Add TautFlex Air UV Clear to the opaque range to make a range of transparent colours.

### Fluorescent

**TautFlex Air** fluorescent colours contain pigments that are very bright and vibrant and glow under blacklight. They must be applied over a white background. Exterior durability is poor but a coat of TautFlex UV clear will help. Available in clear/white, yellow, red, pink, orange and green.

### Metallics

**TautFlex Air** silver and gold are available ready for use. To prevent tarnishing always apply a finishing coat of TautFlex UV clear.

### Pearlescent

**TautFlex Air** pearlescent silver concentrate can be mixed with reduced TautFlex Air colours to achieve a shimmering metallic look. Simple to use. Select an opaque colour (eg Reflex Blue) and reduce it with equal parts of TautFlex Air UV Clear. To this add equal parts of pearlescent silver concentrate.

# Application

**TautFlex Air** is a thin medium which allows the pigments to settle to the bottom of the bottle. Each bottle contains 2 glass balls to help mix the paint when shaking the bottle. It is important to shake the paint well before using.

TautFlex Air, in old and part full bottles, that has been subject to heat has a tendency to polymerise and form a skin. It is important to filter this skin before using.

**Tip** – Cover the end of the bottle with a mesh filter and screw the flip top pouring lid on.

**TautFlex Air** is ready for use but may need a small adjustment to suit some airbrush applications. It can be thinned with water (up to 20%) or can be thickened using TautFlex thickener. This is very useful if any hand brushing is required.

**TautFlex Air** is best applied at high air pressures (60 to 100 psi if the airbrush can cope). High air pressures atomise the paint to achieve an extremely fine spray. Realistically these pressures are not possible and a minimum air pressure of 30 psi is suggested. A dual action airbrush with medium to large tip is also recommended.

As **TautFlex Air** is thin, the paint must be applied in thin light coats to prevent sagging. Even though **TautFlex Air** dries quickly, using a blow dryer between coats will further speed the process.

A final coat of **TautFlex UV** clear will impart a uniform gloss and give the artwork a protective finish. TautFlex UV clear is available in gloss and can be reduced in gloss with the addition of TautFlex matting agent.

## Substrates

**TautFlex Air** can be used without basecoats onto many flexible and rigid surfaces.

- Vinyl or PVC (eg banners, wheel covers, chairs, jackets)
- Leather (eg clothing, furniture)
- Cast and Calendered Computer Vinyl and Decals
- Fabric (eg T-shirts, denim)
- Paper and Board
- Magnetic Sheeting
- Rigid PVC (eg Foamalux)
- Glass
- Ceramics
- Polycarbonate Sheeting

We **do not recommend** applying **TautFlex Air** directly onto acrylic or polypropylene and polyethylene surfaces. Always test the adhesion of **TautFlex** on surfaces that are unknown.

Using Viponds **TautFlex** undercoat on rigid surfaces will fill surface imperfections and improve the adhesion, finish and gloss

- Timber, MDF, customwood, chipboard
- Colourbond and primed metal surfaces
- Plasterboard
- Previously painted surfaces
- Fibreglass

**TautFlex** undercoat can be applied by brush, roller or spray. Sand with 240 – 320 free cut paper for a smooth finish.

# Surface Preparation

It is important that the substrate to be airbrushed is properly prepared to ensure acceptance of the paint and to obtain proper adhesion. If surface preparation is insufficient then cissing may occur.

Cissing is the recession of a wet paint film from the surface leaving small areas uncoated. If this occurs during airbrushing then the artwork may be ruined. Cissing may occur on oily or glossy surfaces (such as highly plastiscised vinyl ) or on surfaces with a high differential surface tension such as polypropylene and polyethylene..

The surface preparation will depend on the substrate.

Paper and board need only be wiped over with a cloth to remove dust. Computer vinyl should be wiped over with a cleaner such as Dissol to remove any oily residue then cleaned with Viponds Prep Vinyl or methylated spirits.

Glossy banner vinyls should have the same preparation but also be deglossed with a fine scouring pad.

T-shirts and other fabrics should be washed and ironed. This will remove any sizing and loose fibres, while the ironing will help produce straight lines while airbrushing.

When using **TautFlex** undercoat thoroughly clean and degloss the surface. Apply one or two coats of undercoat and sand with 320 freecut sandpaper for a smooth surface. Ready for airbrushing.

**Dissol** is an all purpose cleaner for plastics, vinyl and all washable surfaces.

**Prep Vinyl** is a solvent cleaner that will remove contaminates and leave the surface dry. It also acts as a solvent to soften **TautFlex** and can be used as an airbrush cleaner – dilute by 50% with water. If prep vinyl is unavailable use methylated spirits

## Some frequently asked questions

### **How tough and durable is TautFlex Air?**

Once TautFlex Air is dry (approx 30 minutes at 20°C) it forms a very tough, flexible film that is completely waterproof. Although the pigments used are for exterior use, we recommend a coat of TautFlex UV Clear for extended durability.

### **Can you apply a two pack clear on top of TautFlex?**

Yes. Various types of two pack clears (polyurethane & acrylic urethanes) have been applied over TautFlex Air without any problems. The solvents do not attack the TautFlex and the adhesion is excellent.

*Viponds TautFlex UV clear gloss or Graffiti Proof is a possible alternative to the two pack!*

### **How quickly can you recoat with TautFlex Air?**

Under normal drying conditions (above 16°C) and depending on the film thickness, TautFlex will be touch dry within 20 minutes. If the air temperature is below 10°C then it is important to force dry the paint, this can be achieved with a blow dryer.

*If applying mist coats and force drying, TautFlex can be over coated in minutes!*

**Does TautFlex Air need heat setting after airbrushing T- shirts?**

No. Once TautFlex Air has dried it becomes completely waterproof and the T shirts can be washed in warm soapy water. It is good practice to wash and iron T shirts before they are airbrushed. This will remove any sizing and loose fibres, while ironing will help to obtain sharp lines when airbrushing.

**How can the gloss level be reduced?**

TautFlex matting agent can be added to the paint to reduce the gloss level. Add 5% by volume to obtain a satin finish (approx 30% gloss level) or add 10% to obtain a low sheen finish (approx 10% gloss level)

**What do you use to clean the airbrush?**

Do not let paint dry in the airbrush. When not in use run clear water through the brush. If there is a paint build up soak the brush in Vipond's Prep Vinyl which will soften the paint. Then run a 50/50 mixture of water and prep vinyl through the brush. *Prep Vinyl is also a great cleaner for all vinyl surfaces prior to applying TautFlex!*

**Do you recommend an airbrush?**

Water based air paints tend to be slightly thicker than the traditional solvent based air products and tend to polymerise(dry) at the tip in warm conditions. Tip blocking can occur on fine tips and low pressures. Our new formula now minimises tip blockage. We do not recommend any specific brand but suggest a dual action, medium to large tip and minimum 30 psi air pressure.

**What causes cissing?**

Cissing occurs when the paint does not wet the surface properly. In most cases it occurs because the substrate has not been prepared properly (refer to surface preparation).

Possible solutions to overcome cissing are

- a) Prepare the substrate according to recommendations
- b) Rub the substrate with a soft dry cloth and warm the surface. (this reduces surface tension)
- c) Brush a thin coat of TautFlex UV Clear onto the substrate and allow to dry.
- d) Add a small amount (no more than 10%) of Prep Vinyl into the paint. This will help the paint wet the surface. Beware! Too much Prep Vinyl will thicken the paint.

**Can TautFlex Air be brushed?**

Yes. TautFlex Air can be brushed or rolled. There is TautFlex Thickener that will increase the viscosity of the paint to make this easier. Only a few drops of thickener is required. Alternatively purchase TautFlex in cans ready for brushing and rolling.

**Will a banner airbrushed in TautFlex Air stick to itself when rolled up?**

No. TautFlex has excellent block resistance and does not stick to itself once it is dry. In normal drying conditions(16°C) allow at least 4 hours before rolling the banner.