

Flocking with 746 Acrylic

746 Acrylic is a versatile, styrene acrylic based adhesive product which gives a good water resistant and very durable film when bonded to wood and wood composites, concrete, ceramics and some metals and plastics. Metals and plastics may need to be solvent wiped first. It is often used for the application of flock due to the durability of the film and the versatility of the substrates that it bonds to.

It may be used for sealing the edges of wood composite boards and end grains before the application of water based paints or coatings.

7446 Acrylic is a specially formulated polymer, aqueous emulsion designed to produce a highly water resistant and flexible elastomeric film, for instances where a good degree of water resistance is required or for application in areas of high humidity. The properties of the film can be enhanced when the film is used to totally impregnate a suitable reinforcing fabric.

Materials 746 Acrylic is suitable for

- Wood
- Wood composites
- Concrete
- Ceramics
- Some metals
- Some plastics
- Carpet
- Felt
- Fabrics

Preparation of the substrate

The substrate must be clean, dry and grease-free before the adhesive is applied. It is important that the adhesive coating does not get absorbed by the surface of the substrate, therefore, with porous substrates (e.g. wood, chipboard, etc), a primer (such as PVA glue) may have to be used prior to the adhesive. A thick layer of adhesive must be applied (approximately 1/10 of the length of the flock fibre), so that the flock can adhere adequately to the substrate.

The adhesion to metals and plastics is considerably improved after the substrate has been wiped with a solvent, such as acetone. The solvent not only acts a de-greaser, but it also works to key the substrate, enabling a stronger bond with the adhesive.

Method of Application

There are various ways to apply the adhesive; any way that you can apply paint to a surface is also a possible way to apply the adhesive. Any of the following methods can be used (although some will be more successful after the viscosity of the adhesive has been reduced).

- Paint Brush
- Paint Roller
- Spray Gun
- Screen Printing

The adhesive must not be applied to any part of the substrate that does not require flocking. Those areas should be covered with a mask or sealed off with masking tape.

Curing Times

Air Temperature	Curing Time	
	Working Cure	Full Cure
°C	hrs	hrs
°C	hrs	hrs

Using Pigments

Pigments can be added to the adhesive, in order to achieve a seamless finish, where the substrate is a markedly different colour to the flock being used. In addition, if the substrate comprises more than one colour, adding pigment to the adhesive will prime the substrate, giving a uniform appearance. The adhesive is matched to the flock in colour. This also compensates for areas with a slightly lower flock density (e.g. in interior corners).

When applying a dark flock onto a bright substrate a few percents of pigment added are quite sufficient. At least 10% of white pigment has to be added to the adhesive for white flocking onto dark surfaces. When you are flocking a lighter coloured flock onto a darker coloured substrate (e.g. yellow flock onto a blue substrate) it will be necessary to add white pigment, as well as pigment matching the colour of the flock, to the adhesive in order to attain the appropriate finish.

Reducing the viscosity of Aqueous Adhesives

All our aqueous adhesives can be used straight from the container, they can also be diluted with water. By thinning down the adhesive, you increase the range of possible uses, for example, priming a substrate or spray application.

To thin down the aqueous adhesives, simply use clean water. The adhesive can be thinned down by upto 8%

Storage

746 Acrylic should be stored in well sealed containers (to prevent the evaporation of water and the formation of a skin on the surface) away from heat, direct sunlight and frost, at temperatures between 5°C and 25°C for not more than 6 months. Higher temperatures will affect quality and cause the formation of crusts and skins, especially if the containers are not tightly closed or subjected to direct sunlight for long periods.

Cleaning

Equipment may be easily cleaned with water if the adhesive is liquid, however, in the event of the adhesive drying, solvents e.g. Di-Limonene, Trichloroethylene or MEK will be necessary to remove the dried film. It is therefore recommended that the adhesive is cleaned off while it is still wet, as solvent use should be avoided wherever possible. Screens should be cleaned regularly before the adhesive dries.

Health & Safety

746 Acrylic is classed as having low level hazard if handled with normal care. However, it should not be ingested and care should be taken to avoid contact with skin and eyes. Splashes should be thoroughly rinsed with water.

Spillages can be absorbed with sawdust or other suitable material and small quantities may be washed away with water according to Local Authority Regulations.

The adhesive is water-based and is, therefore, non-flammable.



Suppliers of.....

Flocking equipment

Flock

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Adhesive Applicators

Pigments

Protective Clothing

DCA Electrostatics

Campbell Coutts Ltd
Unit 7,
Tower Industrial Estate,
Tower Lane,
Eastleigh,
Hampshire,
England,
SO50 6NZ
sales@flocking.biz
www.flocking.biz
tel: +44(0) 23 80613700
fax: +44(0) 23 80613355