

PRODUCT INFORMATION

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DIGITAL LIQUID LAMINATES

Water based clear protective coatings for inkjet vinyl media

GRAFFITI PROOF MACHINE LAMINATE

Description

Graffiti Proof Machine Laminate is a two part water based clear that has been formulated to apply onto digitally printed substrates with a machine laminator to provide protection against graffiti paints. It offers the same properties as UV Digi Clear but has superior chemical resistance to allow the removal of graffiti with Viponds Graffiti Remover. Graffiti Proof remains flexible and also contains UV absorbers that will provide the same level of UV protection as Viponds UV Digi Clear.



General

Most graffiti is created using aerosol paints which are enamel or acrylic based. The Graffiti Proof Clear is resistant to attack from the solvents in these paints. The Vipond's Graffiti cleaner will remove the graffiti easily within 24 hours. It is important to remove graffiti quickly to discourage the graffiti artist, but also to make removal easier. Enamel paint that has been allowed to dry for over 24 hours is much more difficult to remove.

There are a variety of felt tip permanent markers that are used by the the Graffiti artist. Some of these cannot be completely removed from the Graffiti Proof because the dye stains the clear and a residual amount remains. These stains can only be removed carefully with a scotch brite pad and then recoated with clear. On some prints the graffiti clear can be peeled off - in this instance the Graffiti clear becomes a sacrificial coating.

Permanent or Sacrificial

The adhesion of Graffiti Proof onto digital prints will vary depending on the substrate and ink used. On some prints the Graffiti Proof can be removed (peel off) without damaging the print allowing all Graffiti to be removed. The print can then be recoated with Graffiti Proof. If a more permanent bond is required then apply one coat of UV Digi Clear then one coat of Graffiti Proof.

Note: It is important to thoroughly evaluate adhesion of Graffiti Proof on all print systems.

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Use

Graffiti Proof is water based and therefore can only be used on substrates, inks or pigments that are *not* water sensitive. Always test before using and check adhesion.

This product is ideal for vinyl banners but has limited use on self adhesive vinyl. The graffiti coating may shrink the vinyl and cause edges of the vinyl to lift and peel. Further tests are underway to resolve this issue

Surface Preparation

The success of this product is determined by the level of adhesion to the substrate and ink. Generally no surface preparation is required, but if the surface is contaminated then the Graffiti Proof may not wet the surface and cissing (does not form a continuous film or may form beads on the surface) may occur. A second application of the Graffiti Proof may solve this problem.

It is also important that the ink is completely dry to prevent outgassing. Check with the ink manufacturer for drying specifications.

Preparation

The cross linker is added at a rate of 12.5 ml per litre of Graffiti Proof.

Gently stir in the cross linker (do not shake as this will promote bubbles)

Allow to stand for at least 15 minutes then stir again before application.

The cross linked Graffiti Proof maintains its reactivity for approximately 24 hours. This mixture can be reactivated by the addition of more cross linker and used again. – no waste!

Application

This product has been especially formulated to apply through a machine liquid laminator. It has higher solids than the standard product to achieve maximum dry film thickness per pass and is formulated without retarder to improve drying times under heat banks.

Application on a 64 micron bar will leave a dry film thickness of approx 20 microns.

At this application thickness the product will be used at a rate of 16 square metres per litre per coat. This will offer good scratch and water resistance and some graffiti resistance but two coats is required to allow multiple removal of graffiti and to offer UV resistance.

Drying

Most laminating machines will have a drying mechanism to allow roll to roll operation. The drying time will depend on roller speed, film thickness and heater temperature and must be ascertained by experimentation.

If the machine does not have a drier then the following parameters are important.

Do not apply if the temperature is below 10 deg. C or in high humidity. Under normal drying conditions it will be touch dry within 20 minutes and can be recoated after 2 hour. Allow overnight drying before rolling up prints.

After drying (2 hours) the clear has some anti graffiti properties, but does not achieve full cure until 48 hours.

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Gloss Level

Graffiti Proof dries to a gloss finish. A lower gloss finish can be obtained by addition of the Digi Clear Matting Agent but this will reduce the effectiveness of the graffiti properties and the exterior durability of the clear.

Thinning and Cleaning

If thinning is required use clean water only. Addition of water will reduce the dried film thickness of the laminate. Clean equipment with water. Methylated spirits will soften freshly applied Graffiti Proof and assist in cleaning.

Removing Graffiti

Use Viponds Graffiti Remover to remove graffiti. Saturate a rag and wipe over the affected area. Repeat until removed. Read safety and application data before using. It is not recommended to use alcohol type solvents such as methylated spirits or isopropyl alcohol as they will soften the Graffiti Clear.

Availability

Ex Stock	Graffiti Proof	4 litre,	10 litre
Ex Stock	Cross-linker	50 mls,	125 mls

Testing

The digital print market is continually changing, with new substrates and inks being offered on a regular basis. As the methods and conditions of application and use of this product are beyond control of Vipond's Paints Pty. Ltd. it is recommended that the customer tests the product thoroughly for their own particular application.

The main test is to check adhesion – Graffiti Proof forms a very tough film and if the adhesion is not satisfactory then the clear can delaminate from the substrate. This may be a desired property as it becomes a sacrificial coating. It is also important to determine the best method of application and film thickness required to achieve the desired properties for the end application.

Call customer service (03) 93504188 for further information or for the location of your nearest stockist.

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