


Version October 2016	Processing Instructions <i>PVC Media for digital printing</i>	
--------------------------------	---	--

General

Intercoat is using high-quality soft-pvc-films for their produced large format printing media. The properties of the PVC film may change depending on the temperature and other environmental influences. To ensure proper processing of the products, we recommend observing the following processing instructions.

Batches and serial numbers

Material properties can slightly vary between different batches. Hence, if a job requires the usage of multiple laminate rolls, it is strongly recommended to use only rolls from the same batch.

This can be done using the serial number, which is located externally on the role label on the box and has the following format:

XY/ABCDE-FG (example. 34/123245-01)

If the first 7 digits match, the rolls have been produced from the same batch. Please check in advance whether the rolls can be used together.

Traceability of the rolls is ensured by serial numbers on labels, which attached to the roll cartons. Design of labels allows to remove small stickers with information about material and serial numbers. These can be attached to roll core and to production documents. As traceability is impossible without information about the serial number, it is recommended to keep sticker with serial numbers for internal documents.

Storage and processing instructions

The rolls are fixed in a box with end-caps, which enable hanging storage in a box. We recommend storage of the box standing on the sides. If roll is stored lying on the film surface weight of the rolls can lead to matt patches on the film surface. For storage, a dry and cool room-climate with a relative humidity 40% to 55% at a temperature of 10 ° C to 23 ° C is recommended. Products must stored out of direct sunlight. Please follow the specified storage instructions in the data sheets.

Printing

The print media should be allowed to sufficiently acclimatize to temperature inside production areas prior to printing (min. 24 hours). Temperature fluctuations in production area should be avoided, as this can lead to curling and weaving edges. Digital print media are basically sensitive to any contamination. Touching the surface to be printed with bare hands should be avoided. The damage is most probably visible in the printed image. We recommend the usage of-cotton gloves when handling the rolls.

Before starting the printing process, the film surface has to be controlled. Different materials can have different settings on the printer (temperature, ink limit, printhead alignment, print speed) and the control software required and should be tuned and optimized prior to printing on the material.


Drying

The solvent contained in the - ink must evaporate after printing. Therefore, freshly printed media should be spread out in a well-ventilated place before further processing. The drying time depends on the ambient temperature. At a temperature of about 23°C, we recommend a drying time of at least 24 hours.

Insufficiently dried films shrink after printing. If the film is sticked without proper drying, it is expected to shrink on the substrate and delamination at the edges may occur. Plotting in printed area may lead to shrinkage of cut contours if drying time is insufficient. If the printed film is laminated, insufficient drying can affect adhesive strength and durability. In addition, blistering can occur by residual solvents.

Protection films

To increase durability of the digital printing film and the printed image, we recommend lamination with a protection film. INTERCOAT provides appropriate laminating films with the PROTEC series, available in gloss, matt and semi-matt finish. The laminating film must be matched to the printing material, ie. a monomeric printing media should be laminated with a monomeric PROTEC film. For polymeric printing media only polymeric laminating films are highly recommended. Lamination can be carried out cold or at maximum temperature of +40°C. Tension in laminating process must be avoided, as it may lead to curling of the material.

Version October 2016	Processing Instructions <i>PVC Media for digital printing</i>	 INTERCOAT Self-adhesive. Quality.
--------------------------------	---	---

Application

Values for peel adhesion given in the technical datasheets are determined according to FINAT Test method 1, unless otherwise specified. Substrates used for measurement is glass and adhesion is allowed to built up for 24 hours before measurement.

The adhesive strength is dependent on the substrate on which the film is applied. The surface must be dry, clean and free of oil, grease, silicone and other impurities. We recommend the usage of suitable surface cleaners that evaporate without any residuals, e.g. isopropanol. Before application cleaner should completely dry out residues due to improper cleaning can affect the adhesive strength and durability and may lead to blistering.

Minimum application temperature specified in the datasheet must be considered.

Within the first 24 hours after application, the adhesion between the film and the substrate builds up. We recommend that temperature exceeds the minimum application during built-up process.

If the film is applied wet, it must be ensured that the water between film and substrate is removed quickly and without any residue. We recommend using a scraper. Wet-application in outside areas shall be carried out at minimum temperatures of +18°C.

By wet-application whitening of the adhesive layer may occur, which can occur more or less for water-based acrylic adhesives and cannot be considered as a quality defect. Haze will disappear within 24 to 48 hours.

If whitening of adhesive layer is not desired, we recommend the use of products that are equipped with our Diamond Air Technology Liner D17. We recommend using only dry-application.

Removeability

For removal of repositionable films minimum substrate temperature of +20°C is recommended. Films should be removed starting from one corner and pulling with constant force under an angle of 180°.

Notice

These processing instructions are based on our long experience and knowledge as film specialist and manufacturer of self-adhesive materials. However, not all relevant aspects are described here and professional knowledge and skill of sign-makers are presupposed.

Please note that due to the large number of possible influencing factors appropriate tests must be carried out in advance for each application.

No legally binding warranty or certain qualities can be derived from this information.

This document is valid from October 2016

AMC AG DIVISION INTERCOAT

Boschstraße 12

D - 24568 Kaltenkirchen

www.intercoat.de

info@intercoat.de