



ACRYLAC® PROTECTION 570 040/40 Water-based emulsion coating

Application

For wet-on-dry and wet-on-wet coating in sheet-fed offset presses with coating unit
Recommended drying equipment: hot-air blower and extraction unit

Substrate

Paper/board

Special properties

Average gloss, very good rub resistance, universal protective coating
Average drying speed, conditionally suitable for double-sided coating
– pre-production test recommended.

(Please also note section entitled „Special instructions“ on page 2.)

	570 040/40
Viscosity/draining time s ¹⁾	approx. 40 s
pH	7.8 - 8.4
Density (approx.)	1.02 g/ml
Double-sided printing	conditional
Heat-sealing resistance, uncoated PP film ²⁾ (Acrylate-coated films are not suitable)	good
Rub resistance	very good
Application rate, wet ³⁾	4 - 8 g/m ²
Thinner	Water

1) As-delivered viscosity at 20 °C (draining time per DIN 53 211, 4 mm Ø nozzle)

2) Test conditions: 130 °C, 1 s; 0.5 bar (tested using heat-sealing unit from Brugger)
Test material: coated cellulose board, preprinted with oxidative-drying ink

3) depending on applications process, substrate and ink coverage

The values cited are typical values. They can be seen as guidelines, but not as specifications.

Cleaning

We recommend you use ACRYLAC® Cleaner 10 T 0045 to clean rollers, rubber blankets, forme cylinders, etc. (see the instructions for use and Technical Information sheet 10.9.01).

To achieve a consistent print result, we recommend you regularly perform a thorough washup of all rollers when using screen rollers.

Auxiliaries

Various auxiliaries are available to help you apply the water-based emulsion coating:

ACRYLAC® Cleaner 10 T 0045	- see Technical Information sheet 10.9.01
Retarder / Anticrazing Agent 10 T 0422	- see Technical Information sheet 10.9.03
Defoamer 10 T 0423	- see Technical Information sheet 10.9.03
Wetting Agent / Thickener 10 T 0690	- see Technical Information sheet 10.9.03

Special instructions

Water-based emulsion coatings are generally slightly alkaline. The offset inks used must therefore be alkali-resistant (DIN 16 524, Part 2). One exception to this is the process ink colour magenta: despite their low level of alkali fastness, these inks can be overcoated with water-based emulsion coatings without any problem.

The coated surfaces can be glued and are suitable for finishing with stamping film (depending on the adhesive, stamping film and processing conditions; we recommend you carry out a test under field conditions beforehand).

Heat-sealing resistance and heat resistance depend upon many parameters, which is why we recommend you carry out tests under field conditions in this regard, too.

If there is a possibility of the package contents or external influences (e.g. moisture, detergents, grease, etc.) having potentially negative influences on the print, you must likewise conduct appropriate tests to determine suitability.

If the coating film becomes affected by moisture (e.g. by the water-based adhesive when laminating), there is a possibility of it causing blocking. In such critical cases, we recommend you use ACRYLAC® Gloss 570 030/40 instead (see TI 10.5.43).

Please refer to Technical Information sheet 10.5.01 for general application instructions and further information about the drying process.

The coating has a shelf life of 6 months from delivery if the container is not opened. After opening the container, the coating should be used up as quickly as possible.

The water-based emulsion coating must be stored in its original container in a dry, cool but frost-free place. Storage temperatures higher than 30 °C have the negative effect of causing the coating to thicken and must therefore be avoided.

Stir well before use.

The product is not considered a hazardous substance within the meaning of current EU legislation. Safety Data Sheet available on request.

Use on food packaging:

The following requirements apply in relation to food and consumables packaging:

- avoidance of organoleptic changes (changes of odour and taste) to the package contents
- migration must remain within the set limits and
- there must be no change in the colour of the package contents.

Migration and invisible set-off must be prevented by arranging for suitable processing conditions and selecting a substrate or primary packaging with adequate barrier properties.

If the substrate used to make the packaging does not act as an adequate barrier, there is a possibility of substances migrating from the packaging to its contents. In this case, we recommend you use our low-migration ACRYLAC-MGA® water-based emulsion coatings (low-migration, organoleptically neutral). The coatings must not come into direct contact with the packaged foodstuffs.

More information on the subject of food and consumables packaging can be found in the information sheet entitled „Druckfarben für Lebensmittelverpackungen“ (Printing inks for food packaging) published by the German Printing Ink Manufacturers' Association.

How supplied

25-kg plastic canisters

600-kg returnable plastic containers

Contact addresses for advice and further information can be found under www.hubergroup.de

This Technical information sheet reflects the current state of our knowledge. It is designed to inform and advise. We assume no liability for correctness. Modifications may be made in the interest of technical improvement.