

# Technical Information

60.C.041 | Water-based Liquid Systems | Coatings, Lacquers, Varnishes, Primers



**ACRYLAC®**

## **MGA GLOSS S 58MGA1300**

Low-migration, water-based coating for manufacturing food packaging

### **Application**

For wet-on-wet coating on sheet-fed offset presses; specifically for the production of low-odour and low-migration primary food packaging, in combination with MGA printing inks.

Recommended drying equipment: hot-air blower and extraction unit.

Recommended application rate: 4 – 6 g/m<sup>2</sup> wet.

Stack temperatures in excess of 35 °C can cause blocking.

### **Substrate**

Paper / board

### **Special properties**

Developed for over coating MGA inks

Good gloss

Middle drying speed

Suitable for single-sided coating

Very good rub resistance

(Please also note section entitled „Special instructions“ on page 3)

	<b>ACRYLAC-MGA GLOSS S 58MGA1300</b>
Viscosity in s <sup>1)</sup>	approx. 40 s
pH	7.5 – 8.5
Density	approx. 1.05 g/cm <sup>3</sup>
Heat-sealing resistance, (1 s, 150 °C, 10 kPa) <sup>2)</sup>	
2 layer of PP film	good
Acrylat-coated films	not suitable
Thinner	Water

1) As-delivered viscosity at 20° C, well stirred (draining time per DIN 53211, 4-mm Ø nozzles)

2) Test conditions: 130° C, 1s; 0,5 bar (tested using heat-sealing unit from Bugger)

Test material: coated cellulose board, preprinted with oxidative-drying ink and coated with **ACRYLAC-MGA GLOSS S 58MGA1300**

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

## Cleaning

We recommend you use Cleaner 10T0145 to clean rollers, rubber blankets, forme cylinders, etc. (see the instructions for use and Technical Information "10T0145 Cleaner for water-based inks and coatings"). To achieve a consistent print result, we recommend you regularly perform a thorough wash-up of all rollers when using screen rollers.

## Auxiliaries

Various auxiliaries are available for use in specific circumstances:

ACRYLAC-MGA Auxiliaries:

- Retarder/ Anticrazing Agent 10MGA0422 see Technical Information about ACRYLAC Auxiliaries
- Defoamer 10MGA0423 see Technical Information about ACRYLAC Auxiliaries

The use of auxiliaries other than these is not permissible!

## Instructions and information on the manufacture of food packaging

When handled and processed in the appropriate manner and applied in line with the recommended application rates, ACRYLAC-MGA water-based coatings, used in combination with MGA sheet-fed offset inks, enable the manufacture of food packaging that complies with the relevant legislation.

ACRYLAC-MGA water-based coatings are formulated and manufactured in compliance with the following publications issued by the European Printing Ink Association (EuPIA): the *„EuPIA Guideline on Printing Inks applied to the Non-Food Contact Surface of Food Packaging Materials and Articles“* and *„Good Manufacturing Practices for the Production of Packaging Inks formulated for use on the non-food contact surfaces of food packaging and articles intended to come into contact with food“*.

ACRYLAC-MGA water-based coatings are formulated using only components that do not migrate or migration-capable constituents that have been evaluated for contact with foodstuffs; the specific migration limits (SMLs) are clearly undershot within the recommended application rate (Ratio: Packing/Filling: 6 dm<sup>2</sup>/kg). This also takes account of potential sources of raw material contamination (NIAS). This distinguishes them significantly from conventional, standard water-based coatings. The migration even of constituents that have been evaluated has been reduced to a minimum with ACRYLAC-MGA coatings.

A special SAP-based monitoring process ensures that mix-ups with unsuitable raw materials during formulation can be ruled out.

The products are manufactured in a plant specifically designated for this purpose and in accordance with good manufacturing practice (GMP).

ACRYLAC-MGA water-based coatings are inspected with regard to conformity and contamination using an analytical test method developed in house.

All raw materials used are recorded throughout the entire production process and can be tracked right back to the individual batch from which they originated.

Information required for the evaluation of finished food packaging can be found in the document entitled *„Statement of Composition of ACRYLAC-MGA water-based coatings used to manufacture food packaging made of paper and board“*.

## **Range of applications:**

- For printing the outside of packaging made of paper or board
  - For dry, non-fatty foodstuffs
  - For dry, fatty foodstuffs
- We recommend the use of special coatings for articles that are packaged or used at increased temperatures.
- The coated surfaces are not intended to come into direct contact with foodstuff.

## **Special instructions**

Water-based coatings are generally slightly alkaline. The offset inks used must therefore be alkali-resistant (ISO 2836/5.3). 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 coatings without any problem. We advise against using inks that are not solvent-resistant, because colour shifts may occur under unfavourable conditions.

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

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.

Further information can be found in our ACRYLAC User Guide and in Technical Information 60.G.001 entitled „Information on ACRYLAC water-based coatings“.

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 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.**

## **Labelling**

Safety data sheet available on request

## **How supplied**

25-kg plastic canisters

150-kg plastic containers

600-kg plastic containers

Contact addresses for advice and further information can be found under [www.hubergroup.com](http://www.hubergroup.com)

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.