

# COLOUR WITH A CONSCIENCE

Sabrina Kurz and Dr. Wolfgang Nowotny introduce the world's first commercially available water-based pad printing ink, designed to offer a safer and eco-friendlier alternative to solvents

Industry players are placing ever-greater emphasis on the environment and sustainability – including the more targeted and careful use of resources. At the same time, there is a growing focus on safety, with requirements and standards constantly being reviewed and updated. Toy manufacturers, for example, are now subject to stringent criteria for product decoration.

Pad printing has long been dominated by solvent-based inks. Now there is another option. Ink manufacturer Marabu, based in south-west Germany, has successfully developed and launched water-based inks for pad printing. The range caters to printers who employ the pad process but would prefer eco-friendlier and nearly odour-free alternative inks.

## WATER-BASED PAD PRINTING INKS

Marabu has extensive experience of working with manufacturers of sensitive products and developing inks that comply with their strict and specific requirements, or eco-friendly alternatives. Against this backdrop, Marabu developed its new Maqua Pad MAP water-based pad printing range of inks.

"With Maqua Pad MAP, we have successfully created an innovative ink range that can be used for diverse applications involving sensitive products" explained Dr Wolfgang Nowotny, Technical Project Manager for the Sensitive Products Segment, Screen and Pad Printing Inks. "The water-based pad printing inks can, for instance, be employed for baby and toddler products and children's toys, as well as for the textile industry. A key strength of Maqua Pad MAP is that it is almost odour-free, and so is very pleasant to work with."

As a result, there are fewer workplace



Maqua Pad MAP water-based pad printing inks are suitable for decorations that must meet strict safety standards, for example in the children's toy industry

safety constraints for Maqua Pad MAP. The solvent content of the ink is very low (under 10%), ensuring it has a very low VOC (volatile organic compound) content. Furthermore, it complies with the Toy Safety Directive 2009/48/EC (DIN EN 71/3), has very low PAH levels and is free from BPA/BPS.

## PROPERTIES AND APPLICATIONS

Maqua Pad MAP is suitable for printing on painted and unpainted wood, ABS, PVC and PC. It can also be used on suitably pre-treated PP and coated substrates. The new pad printing ink range is a press-ready, single-component system. It can be

*"Marabu is currently conducting wide-ranging tests on all kinds of textiles"*

diluted with Retarder WV1 where required. A further benefit of Maqua Pad MAP is its cost-efficiency: the inks are not limited by pot life, meaning the product can be used in its entirety, avoiding waste in most cases. Moreover, Marabu is exploring further use cases for the product. The ink manufacturer is currently conducting wide-ranging tests on all kinds of textiles with the aim of offering textile companies a genuine alternative to conventional solvent-based pad printing inks.

## EYE-CATCHING DECORATION

Children's eyes light up when they see bold colours and with this in mind, toy

manufacturers have long used bright hues to decorate their goods, from mobiles to figurines and from train sets to sports gear. Marabu's Maqua PAD inks are available in satin-gloss

*"A key strength of Maqua Pad MAP is that it is almost odour-free, and so is very pleasant to work with"*

and high-opacity colours. PANTONE, HKS and RAL mixing formulas will soon be available in the Marabu ColorManager. The inks are user-friendly and easy to process. Once dry, the film's high resistance contributes to robust, long-lasting toy surfaces. These properties could also make Maqua Pad MAP of interest to manufacturers who are looking for an alternative to water-based spray and brush inks. ■

Footnote: Maqua is a registered trademark of Marabu GmbH & Co. KG

**Sabrina Kurz is an Applications Engineer – Screen and Pad Printing Inks and Dr. Wolfgang Nowotny is Technical Project Manager – Sensitive Products, Screen and Pad Printing Inks at Marabu**

## Further information:

Marabu GmbH & Co. KG., Tamm, Germany  
tel: +49 7141 6910  
email: info@marabu.com  
web: www.marabu-inks.com



Suitable for printing on wood, the new ink range is available in satin-gloss and high-opacity colours