INK SYSTEM FOR DIVERSE APPLICATIONS

Tampa® Tex TPX - opens up entirely new possibilities for pad printing



Marabu's Tampa® Tex TPX is not just suitable for printing T-shirts and footwear elements. it also ideal for other sensitive products - such as babies' bottles, babies' pacifiers. toys, and packaging for personal care products and foodstuffs

Tampa® Tex TPX:

- Excellent adhesion
- Flexible ink film for enduser comfort
- High opacity on colored and dark materials
- Highly resistant to washing and ironing
- Engineered for printing process reliability and efficiency
- Complies with the strict specifications of major clothing brands (Adidas A01 and Nike RSL) and of baby product, toy and packaging manufacturers

NEW INK FOR SPORTS AND OUTDOOR CLOTHING



Tampa® Sport TPSP is suitable for decorating durable fabrics



New high-tech materials for sports and outdoor clothing must be extremely flexible and hard-wearing. We have expanded our portfolio of inks for textiles to include a new product specifically for these applications:

Tampa® Sport TPSP:

- Highly flexible ink film
- Good opacity
- Highly resistant to washing and ironing
- Excellent adhesion

INKS FOR SPRAY GUNS AND BRUSHES

SENSITIVE PRODUCTS

Enhanced product safety with Magua® Coat MAF and Magua® Color MAC



Marabu offers a water-based range of inks, comprising Maqua® Coat MAF base shades and Magua® Color MAC concentrates

The advantages of this water-based ink range:

- Suitable for spray guns and brushes for use on PVC, polvester, TPE, TPU, biopolymers. leather, wood and polystyrene (styrofoam)
- · Out-of-the-ordinary and highly attractive silk-matte finish
- · Dries very quickly to ensure efficient production
- · No risk of clogging the airbrush/spray gun
- Excellent opacity

LIQUID COATINGS

CLEARSHIELD® LIQUID COATINGS

Performance, Variety, Flexibility



Clear coatings, also called liquid laminates, are an inexpensive way to protect billboards, prints, fine art, sians, banners, awnings, wall coverings, canvas prints, vehicle graphics, and other products. ClearShield water-based liquid laminates offer the same protections as film laminates

ClearShield® Liquid Coatinas:

- Saving of as much as 60% in production costs
- UV-protection
- Chemical resistance.
- Abrasion resistance and flexibility
- Specifically formulated for a variety of inks, application methods (manually with a short nap roller or HVLP spray-gun or automated via a liquid laminator such as
- Marabu's StarLam 1600R)
- Ensure maximum protection for applications such as banners, wall coverings, canvas prints and vehicle graphics.

LAMINATING EQUIPMENT

STARLAM® 1600R ROLL-TO-ROLL LIQUID LAMINATOR

Perfect equipment for your liquid coating application



The StarLam® 1600R Roll-to-Roll Liquid Laminator applies a smooth, consistent coating of Marabu's water-based liquid coatings, making protecting your digital prints a quick and simple process. The StarLam® handles a variety of substrates up to 64" wide and when paired with one of the various ClearShield formulations, you will find the perfect coating solution for your application. This single operator machines' double filtration system needs only periodic attention, making it perfect for a shop's storefront or high production areas.

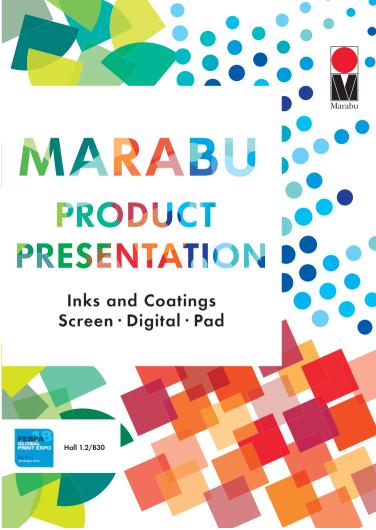
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EXPANDED PORTFOLIO OF DIGITAL PRINTING INKS

UV-curable inkjet products for all leading printer heads



Marabu has extended its UV-curable offering to include two new ink ranges: Ultra Jet DUV-MF: highly flexible ink for wide-format graphical



• Ultra Jet DUV-POP: specialty ink for indoor and outdoor POP/POS



Our established ink product ranges:

- · Ultra Jet DUV-A: highly versatile wide-format ink
- Ultra Jet DUV-C: direct printing of glass or PET containers, and flat glass
- Ultra Jet DUV-GR: an alternative option for Océ Arizona printers
- Ultra Jet DLE-A: LED-curable all-round ink



NEW GBL-FREE DIGITAL PRINTING INKS

Product safety is Marabu's top priority. With this goal in mind, this year sees the launch of a new generation of GBL-free solvent-based inks for wide-format digital printing. Marabu customers will be able to choose between existing solutions and new, highly versatile GBL-free versions.



The advantages of water-based digital printing inks



Working closely with the printing industry, Marabu has developed water-based inkiet inks for digital printing on a variety of substrates:

- For flexible food packaging
- For printing wallpaper
- For printing paper and cardboard, including corrugated cardboard

The focus is on applications where product safety is critical, or where the advantages of water-based systems outweigh other considerations.

NEW SPECIALTY INKS FOR FRONT PANELS (NEW)



The ideal solution for challenging direct printing and second surface applications



The new specialty Mara® Panel MPA inks make it possible to create practically any decorative pattern or markings on household appliances:

- · Unbeatable high-opacity white
- Deep, non-conductive black developed especially for printing the back (second surface) of popular PMMA and PC materials
- Very high electrical resistance: no interference with appliance operation
- Mild labellina: user-friendly during processing
- Resistance to water vapor and popular cleaning agents from leading
- Suitable for the entire appliance even if individual components are made of plastic, metal or alass

SCREEN PRINTING INKS

SMART INKS FOR THE AUTOMOTIVE INDUSTRY

For a high-class look-and-feel in vehicle interiors



Matte aluminum trim or alossy logo badges for car interiors are first printed, then embossed, punched and molded. These operations pose significant chemical and mechanical challenges - for which Marabu's specially developed screen printing inks are just perfect:

- Mara® Poly P: including new glossy and matte varnishes
- Mara® Pur PU: for aluminum components
- Mara® Cure HY: dual-cure screen print varnish for surface effects
- Mara® Mold MPC: suitable for plastic components made by film insert molding (FIM), with excellent adhesion to injection-molded materials and high mechanical resistance

NEW LOW-MIGRATION SCREEN PRINTING INKS (NEW)



Innovative product for PE/PP plastic food packaging



Inks for food packaging are subject to strict quality gudits to verify they are not susceptible to migration. Marabu's new Ultra Pack UVEP range is the first and only ink system on the market that has been tested and approved (by the independent Swiss-based SQTS institute) for the migration-critical PE/PP plastics most commonly used for food packaging.

Ultra Pack UVEP

- Carefully chosen, high-purity feedstock: product complies with the EuPIA Suitability List of Photo-Initiators for Low Migration UV Printing Inks and Varnishes, Part 1A, and the stringent Nestlé Guidance Note on Packagina Inks
- Easy to use in the production process Brilliant, high-gloss colors
- Excellent adhesion and resistance
- · Rapid drying for very high reactivity
- Printing speeds of up to 4,000 items per hour.

SCREEN AND PAD PRINTING INKS

NEW PRODUCTS FOR CONTAINERS AND FLAT GLASS (MAN)



Flexible ink solutions for printing glass



Two new ink ranges have been added to Marabu's versatile portfolio of products for printing glass:

Mara® Tech MGO:

- Single-component baking ink for screen and pad printing both alass and metal
- · Contains silicone, and is suitable for both first and second surfaces, in particular for containers and flat glass
- Is both a single-component product and BPA-free
- Maximum process reliability
- For sensitive products such as babies' bottles, drinking glasses and medical devices

