

# Screen Printing Inks

Setting the Standard in Expertise, Quality, and Productivity

## Marabu

## Your proactive partner for printing inks



Marabu is a world-leading manufacturer of screen, digital and pad printing inks. The company is headquartered near Stuttgart, southern Germany a region renowned for its pioneering technology and engineering prowess. For over 60 years, we have been developing inks that have repeatedly raised the bar for both industrial and graphic applications.

In conjunction with our international subsidiaries and selected sales partners, Marabu offers high-quality inks in over 80 countries. For us, success is all about helping our customers achieve efficient production processes. That is why our focus is squarely on quality, not quantity. And on developing tailor-made answers to specific needs - creating made-to-measure inks that enable significantly higher productivity and tangible cost savings. To this end, we also offer comprehensive technical support and practical training.

As a chemicals company, we understand the need to protect people and the environment. Moreover, Marabu has always been committed to business sustainability and we have consistently put these principles into practice.



#### Marabu – facts and figures

- Founded in Stuttgart in 1859
- A family-owned business
- 15 subsidiaries worldwide
- Production sites: in Germany (Tamm and Bietigheim), USA (Charleston) and Paraguay (Ciudad del Este)
- >500 employees worldwide
- Exports account for 80% of sales

- Sony Green Partner (2003) Member of EuPIA, CEPE, ESMA, BVDM

# Marabu screen printing inks

Expertise based on over 60 years of hands-on experience



Screen printing is highly versatile, creating possibilities that no other process can. To make the most of this technology for decorative and functional applications, flexibility and expertise are a must. And by partnering with Marabu, you are guaranteed a solution tailor-made to your requirements.

Marabu has long played a key role in shaping screen printing technology. Our innovative ideas and products combined with our in-depth knowledge of printing processes have been instrumental in driving this technology forward. All over the world, Marabu is synonymous with high-quality inks, manufactured to the highest standards.

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#### Product range

You can find the full range of Marabu screen printing inks in the product overview (complete with table of substrates) on our website.

## Our products and services

What makes us stand out from the crowd

When it comes to screen printing inks, Marabu is a true technology leader. And we are not only dedicated to creating high-quality inks, we also maximise customer benefits through expert advice. Our experience guarantees exceptionally reliable results each and every time.

### What makes Marabu your trusted partner?

### Unparalleled expertise for all applications; leading-edge research and development

Are you looking for UV inks designed specifically for glass, low-migration inks for packaging printing, or UV LED curable solutions for a variety of substrates? Always one step ahead of the market, Marabu has the right answers. Our ongoing research and development enables us to design innovative products to meet the very latest real-world challenges of our customers.



## Environmental protection and product safety

Marabu is committed to a better future for our planet. Since the founding of our company, corporate responsibility – particularly environmental protection – has been at the heart of our business. We employ a dedicated environmental protection officer and operate a department devoted to ensuring product safety. We abandoned the throwaway mentality a long time ago and implement the principles of sustainability across our organization. Plus, we systematically reduce hazardous substances in our products, making our standards among the highest in the industry.



Marabu is certified to DIN EN ISO 9001 and DIN EN 14000.



### Boosting productivity and efficiency

Equipment downtime harms productivity and impacts your bottom line. Reducing unnecessary costs is a must, and our high-quality printing inks can make all the difference. Benefits include highly reproducible printing results and more energy-efficient drying. All in all, Marabu inks allow you to work faster, with greater precision, greater uptime, and with lower power consumption.



### Expert advice and assistance – wherever you are

Marabu's extensive international network of subsidiaries and partners in over 80 countries means you can count on first-rate support, wherever you are based. By turning to a local contact who speaks your language, you can leverage Marabu's in-depth industry experience to enhance your printing processes.

## Glass

## Exceptional inks for an exceptional material

When it comes to glass - whether for bottles, containers, panes, furniture, or communication devices - manufacturers need to make their products stand out. Marabu is the leading specialist for organic inks for glass, offering a broad range of brilliant shades.

A variety of design possibilities, lower costs, and ecofriendliness: few materials offer the unique qualities and exceptional versatility of glass. But printing on this challenging substrate requires the right expertise. Marabu's line of inks for glass has the perfect solution whatever your industry and whatever the application.



#### Ultra Glass UVGL

- UV-curable two-component ink that is very durable, even without oven drying
  Saves energy, time and space
- Perfect for glass packaging and for large panels of flat glass for indoor use





### Gold and silver effects

Hot stamping in combination with UV-curable inks Results in high gloss metallic effects which are absolutely comparable to precious metals, at a much lower price.

#### Ultra Glass UVGO

- UV-curable, high-gloss two-component ink
  Dishwasher-safe, very high resistance to alkaline substances and chemicals
- Broad selection of brilliant and highly

- Mara® Glass MGL Solvent-based ink that is highly resistant to chemicals and container contents and is dishwasher-safe
- Vivid and versatile colour palette: Brilliant
- shades with a high-gloss finish Can be laminated using all popular films

#### Ultra Glass UVGL Primer

- Any favoured design can be printed on glass surfaces
- cliché for the hot foil
- The foil only adheres to the areas that were primed with UVGL





## **Flat glass**

Bring your ideas to life

Create a unique look for your flat glass products - with Marabu's range of organic inks for glass. Organic inks allow you to create the full range of colours and effects.

### **Container glass**

Where strength meets aesthetic appeal Glass is a strong, attractive material that offers a host of exciting and innovative design possibilities.

## Container printing

### For a premium look and feel

Printing directly onto PE, PP, PET, or other plastic containers offers a host of possibilities – and presents a wide variety of challenges. Brand-specific designs give your products an unmistakeable look and feel, helping you achieve competitive differentiation. Screen printing is the ideal process for these goals.

Plastic packaging, such as bottles and tubes, comes in all shapes and sizes. The material itself, its colour and flexibility, can all vary greatly. Whatever sort of packaging you are printing, Marabu's portfolio guarantees the very best results. Plus, our low-migration inks ensure maximum safety.



#### Make a statement

Print directly onto containers using screen printing technology: for great coverage, durable results and a unique appearance.



#### Ultra Pack UVC

- UV-curable, high-gloss ink for printing directly onto containers
- Suitable for use on a wide variety of substrates
- Very resistant to water, steam and packaging contents

#### Ultra Pack LEDC

- LED-curable, high-gloss ink for container printing and flatbed applications
- Very durable thanks to high resistances
- Silicone free Opaque White 171

#### Ultra Pack UVK+

- UV-curable, high-gloss ink for pre-treated polyethylene and polypropylene
- Dries very quickly, maximum possible opacity
  Very good resistance to water and steam for one-component applications, e.g. on cartridges



## Labels

## Create a stand-out brand image

From the transparent no-label look to premium labels offering high resistance to chemicals – these unique printed design elements make products instantly recognisable. For upmarket items requiring high durability and an appealing lookand-feel, screen printing is the only way to go. Excellent opacity (important for dark substrates), a choice of high-gloss or matt finish (for attractive contrasts), exceptional resistance to packaging contents and mechanical strain – all good reasons to opt for screen printing.

Marabu screen printing inks are exceptionally fast drying. And high compatibility with other printing processes such as flexography or offset printing makes Marabu UV ink systems the clear number one choice.

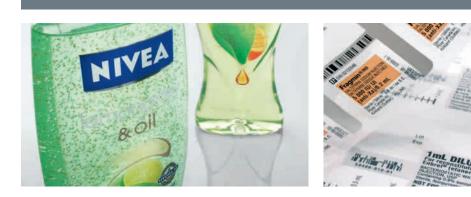


**Eye-catching special effects** Screen printing is particularly effective for creating special effects such as fluorescent or metallic finishes, mother-of-pearl or textured effects.

#### Enhancing the safety of your products

Inks visible under UV light and braille coatings allow you to create effective safety labels.









#### Ultra RotaScreen UVSF

- Ultra RotaScreen UVSF
  UV-curable, high-gloss ink for rotary screen printing
  Silicon-free, for maximum adhesion of flexographic inks
  High resistance to chemicals and mechanical strain

- Ultra RotaScreen UVRS
- UV-curable, high-gloss ink for rotary screen Provide the second second second second printing
  Ideal for overprinting with UV-letterpress and UV offset inks
  Very fast-drying for high printing speeds

#### Ultra Pack UVC

- UV-curable, high-gloss ink for flat-bed label printing
  Suitable for an extremely wide range of substrates
  Very good resistance to packaging contents, water and steam



## Membrane switches

### Great designs at your fingertips

Electronic switches and controls must work reliably, be easy to use, and be insensitive to dirt or dampness. They come in all shapes and sizes, creating infinite design possibilities. Marabu not only offers inks specially designed for membrane switches, we are one of the few specialists to deliver end-to-end expertise - covering inks, adhesives, membranes, films, and production processes.

#### Standard or state-of-the-art?

When manufacturing membrane switches, all individual elements - inks, films, and adhesives - must work in harmony to prevent adverse reactions. With our extensive experience as an ink supplier and our comprehensive know-how when it comes to materials and processes, we are at the forefront of innovative developments such as UV-curable ink systems.



#### Mara<sup>®</sup> Switch MSW

- Solvent-based, satin-gloss ink
- Very easy to work with and does
- not clog the mesh screen Highly flexible ink film for finishing processes such as die-cutting or embossing

#### Ultra Switch UVSW

- UV ink with exceptional elasticityVery good adhesion to the substrates
- and between the individual ink layers Compatible with MSW



#### Vital tools in today's high-tech world

Membrane switches must work reliably - placing high demands on screen printing systems. Marabu screen printing inks are compatible with all widely used films, making them suitable for any application.



Infinite design possibilities Membrane switches are highly versatile and are used in a wide range of electronic devices.

## Automotive and inmould

### The challenges of dashboard design

When buying a car, customers scrutinise every last detail – particularly when it comes to design. And as consumers become more discerning and quality and safety regulations become stricter, screen printing inks and processes must rise to the challenge. Automotive applications place high demands on printing inks: they must be resistant to extreme climatic chamber tests; must be highly opaque; exhibit resistance to sweat, abrasion, and cleaning products; and adhere well to polycarbonate. Marabu offers the perfect solutions to these challenges whether for 2D or 3D parts.

#### In-mould decoration: demanding yet versatile

Coloured injection-moulded components featuring scratch and abrasion-proof designs have become part of our everyday life. The in-mould decoration process is the perfect solution for creating these visuals, but this complex technology demands an exceptional ink: one that combines maximum elasticity with high resistance to temperature extremes.



#### Libra Matt LIM

- Matt solvent-based inkHigh opacity and outstanding
- printability • Excellent performance in climati
- chamber tests
- We recommend Maraswitch MSV for 3D applications

#### Mara<sup>®</sup> Mold MPC

- Solvent-based, one- or two-component ink
- Excellent elasticity and resistance to
- temperature extremes
- Adheres exceptionally well to injectionmoulded materials

#### Style meets substance

In-mould decoration is perfect for printing dashboard components such as speedometers, switches and other controls.



# Graphic screen printing

## Infinite possibilities – one-stop solutions

Businesses specialising in screen printing create a huge variety of final products. Working with diverse substrates demands the right combination of specialist knowledge, experience, flexibility, and innovation. Marabu delivers on all counts and our remarkably broad selection of inks offers a solution for every application.

The exceptional quality of our inks means you can take on express assignments without compromising on quality. Our state-of-the-art manufacturing technology ensures consistent product attributes. So you are guaranteed excellent print reproducibility, without the need to constantly adjust your equipment.

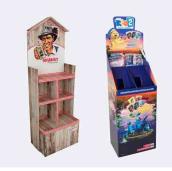


#### Ultra Board UVBR

- UV-curable ink for cardboard (including corrugated card), paper, self-adhesive PVC film, hard PVC and polystyrene.
- Highly elastic, e.g. for creasing, die-cutting, scoring Satin gloss, very fast-drying, for monochrome and colour printing systems
- Ultra Graph UVAR
- UV-curable, suitable for a wide
- Flexible ink filmIdeal for outdoor use

#### Ultra Graph UVGX

- UV-curable, outstanding adhesion to
- Glossy, fast-drying and flexible causing minimal embrittlement of the substrate



**Point-of-sale applications** For graphic prints like hanging, standing or wall-mounted promotional displays (POS/ POP), signs, posters, stickers, etc., for in- and outdoor purposes.

The colourful world of advertising Marabu offers printing inks for paper and all types of plastic - for indoor and outdoor promotional displays, posters, large banners, advertising and other signage, stickers, promotional gifts, and more.



## Signs Leading the way in performance and durability

Signs, information systems, and advertising billboards for outdoor use must be extremely durable and capable of withstanding all weather conditions. Marabu's UV-resistant ink systems are suitable for a variety of applications and guarantee brilliant colours - whether you apply them to painted or powder-coated metals, aluminium, retro-reflective self-adhesive film, or plastic.



#### Libra Speed LIS

- Very good UV-resistance and ability to
- withstand all weather conditions
  High flexibility makes it ideal for vacuum
  forming \_\_\_\_\_

#### Mara® Sign TS

- Ideal colour shade for film classes RA 1-3 • Excellent co-efficient of retro-reflection, in line
- Impressive weather resistance



#### Weather warning

Traffic signage and other outdoor signs and information systems must be able to withstand prolonged exposure to sun, wind, and rain. Marabu's UV-resistant ink systems ensure long-term brightness and readability.

## Identity cards

## Payment, access, time logging – all under control

Smart ID and credit cards are leading the way in the global electronic user-authentication market. And printing plays a key role, particularly in terms of overprintability and ensuring resistance to peeling – guaranteeing the integrity of laminated cards.

Marabu solutions for single- or double-layer identity cards really stand out from the crowd. Our inks can be laminated and are available in a wide range of metallic finishes and other special effects. What's more, they are highly flexible, and can be overprinted using offset techniques.



#### Mara® Flex FX

- Solvent-based ink, ideal for laminatic
- Highly flexible; suitable for embossing, die-cutting, and laser marking
- Specialty products and versatile colour mixing system



## **Optical discs**

### Great entertainment begins with the disc design



Ultra Disc UVOD

- UV-curable ink with very low radial deviation
- Fast-curing, ideal for the latest high-speed systems
- Optimum rheological adjustment, very good flow

#### Ultra Set UVOS

- UV-curable
- Fast-curing, ideal for the latest high-speed systems
- Optimum rheological adjustment, suitable for use with a variety of offset technologies

Optical discs are used to play films and music and to store digital files. Screen printing onto optical discs requires specialist expertise, and ink systems must be up to the task. The higher the quality of the printing ink, the more flexibility you have in terms of your production processes (i.e. speed, tilt, etc). In this demanding and multifaceted market, printing processes – and the screen printing inks used – must meet the highest technical requirements. Featuring innovative products such as the waterless offset ink, Ultraset UVOS, Marabu ink systems are among the best packages available on the market.



## Special-purpose printing

## Screen printing excels where other processes struggle

Screen printing is exceptionally versatile. No other process offers so many possibilities – whether printing onto glass, metal, PVC, PE, PP, textiles, or acrylic glass. For more unusual applications, the key to great results is selecting inks that offer the right properties to meet your specific challenges: high opacity, exceptional durability, good adhesive properties, or maximum flexibility.



#### Electrical and household appliances

Inks used on electrical and household appliances must be very resistant to chemicals, high temperatures, and steam - and capable of withstanding heavy-duty usage day in, day out. Depending on your requirements, we offer one- or two-component solvent-based or UV-curable ink systems.



#### Sports equipment

There is a huge variety of sports equipment on the market, and every project presents its own challenge. Whether you are looking for inks with high resistance to chemicals and mechanical strain, a high-gloss finish and excellent opacity, or a broad colour palette with a host of special effects - we have the solution for you.



#### Toys

Marabu offers ink systems designed for the diverse substrates used by toy manufacturers. Our inks meet the industry's special requirements - they are free of heavy metals as required by DIN EN 71, and offer maximum resistance to chemicals and mechanical strain for a long product life. When fully dry and assuming good adhesion, the inks are resistant to sweat and saliva in line with DIN 53160.

Further applications:

- Textile printing
- Vehicle fleet livery
- Tarpaulin/sheeting etc

## Special-effect inks

### Exciting the senses; enhancing safety

Visual or tactile effects stir emotions - making them an invaluable advertising tool. But they can also serve an informative function, for example in the pharmaceutical or food industries, where they increase consumer safety. Screen printing is the method of choice when it comes to creating these effects.















#### Mara<sup>®</sup> Chrome MC

- Solvent-based, press-ready silver ink
  For mirror, chrome and metallic effects
- Does not clog the mesh screen; low-odour

- Metallic effects - Bronze powders and pastes
- High-gloss metallic pastes
- Press-ready metallics
- Mirror ink
- Glitter effects
- Pearlescent effects
- Luminescent ink - Glow-in-the-dark inks - Fluorescent inks
  - UV-active inks
- Thermochromatic effects
- Matt, structured and gloss effectste
- 3D effects
- Writeable inks
- Scent effects
- Braille

- Mara® Glow GW Solvent-based phosphorescent ink Three colour shades with diverse pigment types and glow times
- Protective coating is recommended for outdoor use

## Functional inks

### The next generation of inks

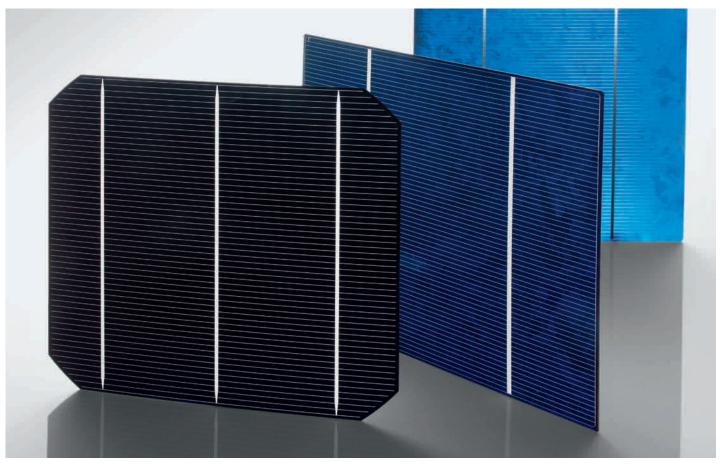
Functional inks support certain technologies, making them more efficient or even performing their own specific function. They can be applied to glass or plastic – and Marabu has addressed this growth market.

Functional inks are used for a host of applications – ranging from fluoric acid etch-resistant coatings for solar technology, to glow-in-the-dark inks with extra-long glow time, to primers for substrates with very poor surface properties.



#### Do you have a very specific or entirely new application? We can offer expert advice.

Functional inks are available not only for screen printing, but also for pad and digital printing. They can be injected, sprayed, or applied using roller coating, for example.



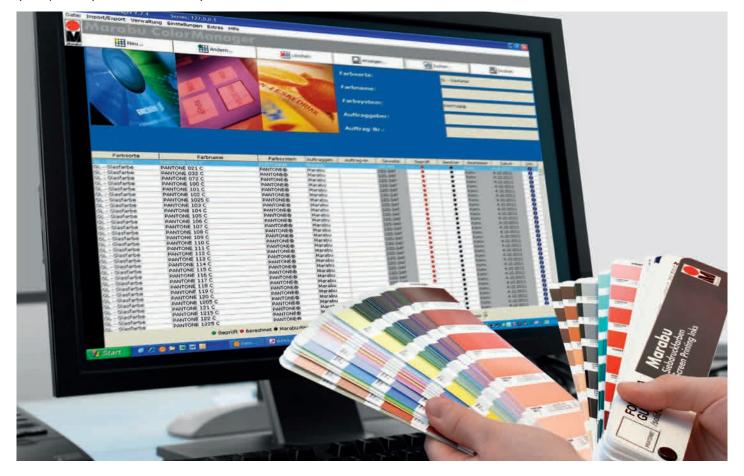
## Colour management

### For perfect reproducibility every time

Graphic and product designers take colour selection very seriously – and have very precise ideas about how the finished results should look. In order to guarantee the best quality and maximum reproducibility, Marabu offers tried-and-tested tools specially designed to meet these high standards.

#### Colour matching made easy

Finding precise colour matches has never been so easy – thanks to our high-performance, user-friendly **Marabu-ColorManager MCM 2** software. A comprehensive database includes PANTONE<sup>®</sup>, HKS<sup>®</sup> and RAL colour matching systems for screen and pad printing. The **Marabu-ColorFormulator MCF**, on the other hand, works completely independently of colour reference systems: this database is linked to a spectrophotometer, allowing you to create precise reproductions of your colour samples and ensure optimum printing results. We also offer automatic ink dispensing systems: **Marabu-ColorDispenser**. Simple, user-friendly operation and maintenance makes these systems stand out from the crowd, as they allow you to create a perfect colour mix at the touch of a button.



## Research and development Always thinking ahead

When it comes to quality and productivity, our inks and liquid coatings raise the bar every time. This process of continuous improvement is based on more than 60 years' in-depth expertise and experience. And it is complemented by our proactive philosophy of "thinking ahead". That means that we regard each and every job as a new challenge – and so we strive to develop solutions that truly fulfil your specific needs today and tomorrow.

#### Quality begins with raw materials

We leave nothing to chance – starting with the suppliers of our raw materials. Long-standing, reliable partnerships ensure that only the best, purest raw materials go into our inks. And our inks are manufactured to the strictest tolerances. In other words, they are products that deserve the label "Made in Germany".

#### Designed for real-world needs

Our inks are the result of a multi-stage process. Developers, engineers, and product managers all play a part. In addition, selected pilot customers are involved from the beginning. Marabu inks are subjected to numerous tests to verify that they meet real-world requirements. Only then are they good enough for our customers.

#### Dispersion

Our state-of-the-art production equipment, from leading bead mill manufacturers, delivers extremely finely dispersed pigments. This guarantees perfect results every time – for smooth, trouble-free printing processes.





#### Quality control

Marabu inks offer exceptionally consistent quality across all batches and in line with precise specifications. For example, all screen printing inks are passed through a multiple filtration process, and feature exceptionally high sedimentation stability.

#### **Fine-tuning**

Through a combination of multiple analytical methods and devices, we ensure that the physical and chemical properties of our inks are geared to the precise requirements of your applications.





#### Light-fastness and weathering

Marabu tests long-term effects using simulated accelerated weathering according to DIN standards, as well as natural weathering under real-life conditions. Our extensive experience guarantees robust products that are ideal for outdoor applications.

## Service and support

### Expert advice and assistance – available globally and locally

When you partner with Marabu, you benefit from a unique combination of exceptional product quality and expert advice and assistance. Our screen printing inks ensure maximum productivity and cost savings. And thanks to our global network of sales partners and subsidiaries, you have access to our extensive know-how no matter where you are based. You benefit from the greatest possible support at all times – and rapid, reliable supply to anywhere in the world.

- International service and support network of subsidiaries and carefully selected partners offering advice and assistance, wherever you are
- Experienced specialists have extensive knowledge of all our products and can advise you on the right solution for your specific needs
- Skilled professionals help you select the best solution in terms of technology and cost-effectiveness
- State-of-the-art databases generate tailored solutions for all applications
- We offer a **proofing service** on original substrates in line with your needs: helping you find the ideal inks and integrate them into your production processes
- Interdisciplinary teams comprising both R&D experts and product managers work together to design made-to-measure solutions for our customers
- Our training centre offers courses, seminars, and more tailored to selected markets or specific customer needs



#### An expert partner to our customers

Services such as the Marabu hotline give you direct access to our expertise. We view our relationship with customers as a genuine partnership. We can help you resolve your challenges on-site and offer theoretical and practical training to give you a decisive edge in your market.



#### Get in touch with Marabu

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