

Marabu Inks – Perfect Choice for your Touch Panel Decoration

On many devices, membrane switches are increasingly being replaced by touch panels made of glass. The combination of electronics with state-of-the-art glass products results in durable surfaces that are easy to keep clean – making them suitable for medical equipment and building-control systems, for example. Marabu's solvent-based and UV-curable glass inks are ideal for printing onto touch panels.



The term "operator control panels" includes membrane switches, front panels, and touch-screen systems, also called touch panels. They have become a part of everyday life. The increasing popularity of smartphones and interactive netbooks keeps inspiring other sectors to integrate this technology into their devices. Products that were previously equipped with membrane switches are now provided with touch panels. The combination of modern glass design and electronics

offers advantages over other materials, like durable and stain-resistant surfaces.

Typical touch panel applications are:

- All-in-One PCs, Computer monitors
- Car navigation systems
- Vending machines (like for tickets)
- Digital cameras / camcorder
- Information terminals
- Netbooks, ultrabooks, Smartphones, Tablet PCs
- White goods / glass panels

The glass substrate

There are different manufacturing methods and so-called "display technologies" for the production of touch panels. Design and making of the decorative glass surfaces are the core elements for screen printing. The basic material is float glass. Various types of glass are used, which differ in hardness, bonding strength, colour, and fracture behaviour. The glass is often chemically treated and hardened, and anti-reflection coating is applied.

Screen printing inks for touch user interfaces



Usually, the back side of a glass is printed (second surface). The Marabu ink lines Maraglass MGL, Ultraglass UVGL and UVGO, together with the specially adapted, high opacity ink lines MG3C, UVG3C, and MGHT (HT = High Temperature) build the perfect basis for these applications including 3C (3C – computing, communication and consumer electronics) devices, such as smart phones and tablets. The highly adhesive screen printing inks feature high resistance to alcohol, extreme temperatures (MGHT only) and chemicals.

The use of UV inks increases the process safety and speed of multi-layered structures and expands the range of design possibilities for flat operator control panels made of glass (especially for 4 colour process printing and technical halftone gradients (AM and FM halftones)).

The highlights of the Solvent- and UV-based ink lines are:

- Excellent adhesion on glass substrate
- High electric resistance 10^{12}
- High thermal resistance up to 300 °C (only MGHT)
- High chemical resistance
- Very good printability
- High opacity
- Long pot life
- Nearly unlimited mesh opening
- Very high productivity with UV inks

Being committed to advancing inks and coatings, Marabu strives for continuous product developments in each of our print technologies. Our products have raised the bar for the highest standards in the industry. This extensive experience makes us capable of developing trendsetting innovations that give our clients a competitive edge.

For more informations about Marabu's range of screen printing inks for touch panels please visit <http://www.touchpanel.marabu.com> or www.marabu-inks.com.

Marabu GmbH & Co. KG



Marabu is a leading global manufacturer of liquid coatings and screen, digital, and pad inks with headquarters near Stuttgart, Germany. Marabu's track record of innovation stretches back to 1859, featuring many industry-first solutions for both industrial applications and graphic design. With its 15 subsidiaries and exclusive distribution partners, Marabu offers high-quality products and customer-specific services in more than 80 countries. Exceptional technical support, hands-on customer training, and environmental protection are core elements of its corporate philosophy. Sustainable business practices are also key to Marabu's vision. These have been implemented through a number of initiatives, with concrete results – and the company is committed to maintaining this course of action in future. Marabu has been certified to ISO 9001 since 1995 and to ISO 14001 since 2003.