EFI™ VUTEk® GS-TF Ink is a patented, extremely flexible, UV curable digital ink specially formulated for first-surface interior and second-surface exterior/backlit applications where common thermoplastic is specified for deep-draw thermoforming. VUTEk GS-TF Ink exhibits outstanding elongation characteristics while maintaining excellent adhesion and opacity. Additionally, this ink contains ideal characteristics for heat bending and routing of acrylic sheets with no chipping or loss of adhesion.

Curing/Processing Guidelines
Ink will cure well when utilising an optimal cure window of 310–350 mJ / 755 mW. This should provide thorough cure of the product. Adhesion should be a minimum of 95% from curing unit with final adhesion developing within four hours of initial polymerisation.

If a loss of gloss or adhesion due to insufficient cure is noticed, a decrease of saturation levels will increase light penetration and improve cure.

The VUTEk GS-TF Ink vacuum forming system, when properly cured, develops an extremely flexible, formable ink film. Even though the cured ink film has been engineered to optimise processing and handling, the printer must assume responsibility for pre-testing and qualifying the parameters for stacking printed parts prior to each run.

The intensity of cure, weight or caliper of the material and/or elevated ambient temperatures and humidity of the printing and storage environments will influence block resistance.

EFI also recommends that the printer consider the use of slip-sheets or racks until printed parts have cooled. It is recommended that additional precautions be made for shipping by truck as temperature in trailers can exceed 70°C. EFI does not recommend the stacking of VUTEk GS-TF Ink on two-sided prints.
INKJET SOLUTIONS

EFI VUTEk GS-TF Thermoforming Ink

Lightfastness

Emmaqua extensive weathering tests are currently in progress. Estimated exterior durability is three (3) to five (5) years until actual tests are completed. Actual exposure tests should far exceed three (3) to five (5) years. Accelerated machine weatherings are reference standards and cannot precisely reproduce actual outdoor performance. Based on prior correlation of accelerated testing versus real time exposure, 500 hours is equated to approximately one year of exposure in south Florida, USA, where the angle of inclination of the sun is 45°.

Storage

Care should be taken to store ink in tightly closed containers located in a cool 15–27°C dark place. With suitable conditions, unopened ink is expected to have a shelf life of approximately twelve (12) months from date of manufacture.

Precautions

Read the material safety data sheet prior to processing. It contains instructions for precautions to be taken when handling inks. If ink comes in contact with skin, wipe ink off with a clean, dry cloth (do not use solvent). Wash and rinse the affected area with soap and water.