Tech
INFO

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Haptic Effects on Glass with UVGL-RH/-RL

RH= Relief High Viscosity / RL= Relief Low Viscosity: Application and Adjustment Possibilities

Screen
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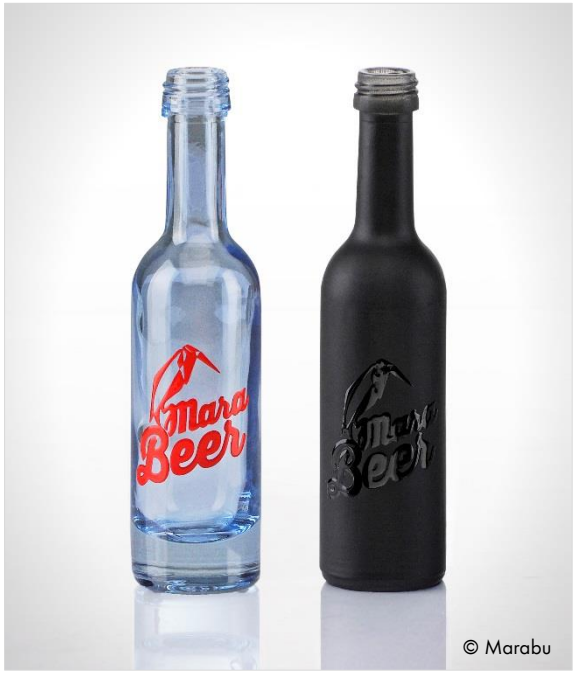


The sense of touch and texture are the first sensory experiences for a human being. With UVGL-RH/-RL a high build text or motif, normally achieved from the glass mould, can be printed.

Due to the infinitely variable mixing ratios a whole range of different effects can be printed. The blending possibilities allow just the right printing adjustments for thick or thin ink films.

Mixtures containing a high proportion of the high viscosity varnish (UVGL-RH) are used in designs covering smaller areas, such as lines, text, and some logos while blends containing a high proportion of the low viscosity varnish (UVGL-RL) are best suited to larger areas, to achieve beautiful, even deposits.

Examples:
Spots and small details

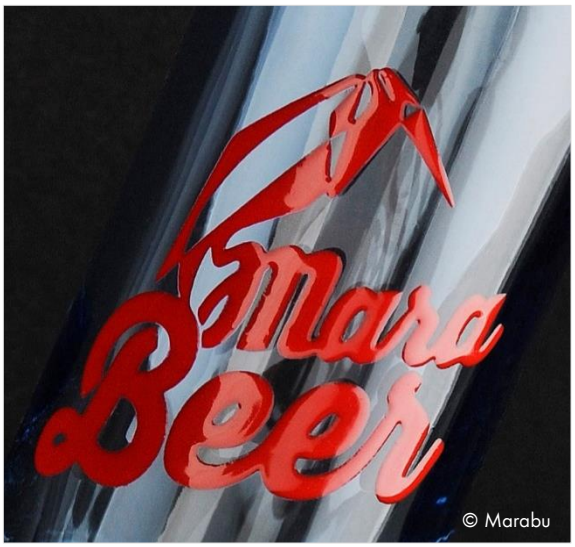
UVGL-RH ← → UVGL-RL

Large, open areas

UVGL-RH → ← UVGL-RL

The relief varnishes UVGL-RH/-RL

- Can be mixed and printed for transparent effects
- Can theoretically also be used individually, but as to our experience, especially in the case of UVGL-RH, flow problems may arise
- Are silicone-free, but can be colourised with max. 15% UVGL basic shades in order to create non-transparent haptic effects with only one printing process **Attention:** If the motifs are printed this way, they are no longer silicone-free due to the addition of basic shades. So, they can only be overprinted with a varnish that contains silicone (e.g. UVGL 910).



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Particularly in the case of high ink deposit, it is thus possible to create opaque prints despite the rather low amount of colour. However, in this case, extra care must be taken to ensure adequate UV-curing.

Initial settings
In order to achieve the exact effect required, the ratios of the high and low viscosity varnishes may need to be adjusted.

For the start, besides the regular addition of 4 % UV-HV 8, we recommend the following:

- Thick ink film, high relief:
  UVGL-RH > 50%
  Low ink deposit, fast flow:
  UVGL-RL > 50%
- A well coated 48-55 mesh with homogeneous mesh equalization
- Squeegee: 75 shore
- The use of a flood-blade

Please note

- The mesh should be as coarse as necessary
- Smeared edges are often caused by poor stencils
- Curing speed and ink thickness need to be optimized
- In the case of surface irregularities it can be helpful to re-adjust the mixing ratio and/or extend the time frame between printing and UV-curing

Contact
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