



Good reasons · Summary of advantages

Good reasons for expressing your ideas with **BEADMAKING 104®** crystal and color glass:

- constant high quality of glass
- intense, glowing colors
- great effect even with small amounts
- lots of glass with interesting color variations, depending on working conditions and fire settings
- lots of reflectively reducing colors
- some compatibility with glass color sticks from other providers such as Effetre, Vetrofond, must be tested by the user.
- some compatibility with overlay glass from our **KUGLER COLORS®** line of products – with calculated coefficient of expansion $93 \pm 2 \times 10^{-7}/K$, must be tested by the user.
- limited compatibility with **KUGLER COLORS®** Aventurin Brown K999, Aventurin Blue K888 and Aventuringreen K059, must be tested by the user.
- still compatible with silver and gold foils, silver leaf and gold leaf, must be tested by the user

Summary of advantages of Friedrich Farblashütte GmbH **BEADMAKING 104®** glass sticks:

- very suitable for making jewellery and in particular unique copies for bead collectors
- even small quantities of **BEADMAKING 104®** produce impressive effects
- high brilliance and great luminosity
- grits which can themselves easily be made from **BEADMAKING 104®** sticks produce lovely accents
- high color stability, because **BEADMAKING 104®** glass sticks are
 - ▶ uniformly colored
 - ▶ non-fading, practically no solarisation
 - ▶ colorfast, non-fading even when exposed to UV rays
- very effective in reflected light
- virtually no dimming of colors

In cases of doubt, we recommend application-technology tests. We are happy to provide you with advice and support.

For further information:

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Beads of fascination

Beads of fascination – With the original **BEADMAKING 104®** products from Friedrich Farblashütte GmbH!

A beautifully worked bead with rich colors and strong color radiance – a dream? This bead makers' dream has now been fulfilled by the colored glass in the new line of **BEADMAKING 104®** from Friedrich Farblashütte GmbH. Following many requests and suggestions

... we have expanded our range with the new line of products for bead makers, the crystal and glass

BEADMAKING 104®

Friedrich Farblashütte GmbH started, and has continually pushed forward, the development of the crystal and color glass with a linear thermal expansion coefficient of $104 \times 10^{-7}/K$ since 2005. Today, we can offer you opaque and transparent glass of particularly high quality for beadmaking. And, above all, with a remarkably interesting spectrum of colors, as the artistic creators desire:

Today we can offer you nearly 30 glasses in

- opaque colors: red and rosé, green, blue, purple, brown, grey
- transparent colors: pink and grey
- colorless clear crystal glass
- highly covering, deep mirror black

Many more, primarily transparent colors will be available very soon.

Do you like a particular color from the extensive palette of our tried and tested overlay glass **KUGLER COLORS®** and would like to use this color to make beads? Then get in touch! Suggestions on the expansion of our **BEADMAKING 104®** range will be much appreciated.

We can provide samples of the available **BEADMAKING 104®** crystal and color glass for you to look at and try out (subject to a flat fee for sharing of the cost).





Using the BEADMAKING 104® crystal and color glasses for beadmaking

by artists and bead makers, making collectors' items, particularly

- making jewellery such as necklaces, armbands, pendants, rings etc.
- making figures out of individual beads such as animals, flowers etc.
- making "marbles"

Effect

BEADMAKING 104® glass is particularly effective when combined with crystal glass, as this increases the glow and the effect of the color applications. This results in a "magnifying glass effect".

Working

Suited very well for creating overlays and unique effects, as the shades of the colors can develop in many different ways.

Product features of BEADMAKING 104® colored and crystal glass sticks

- Approx. dimensions of the sticks:
 - ▶ Diameter (Ø): 2 – 4 mm and 5 – 10 mm
 - ▶ Length: 400 mm
- Range of **BEADMAKING 104®** colors available: 25 colors; in addition, crystal glass and black reflector

Typical values of features*

- Linear thermal coefficient of expansion (COE): $104 \times 10^{-7}/K$
- Upper annealing temperature approx.: ca. 520 °C – 968 °F
- Lower annealing temperature approx.: ca. 420 °C – 788 °F
- Softening point (Tg) approx.: ca. 500 °C – 932 °F
- Working range approx.: > 900 °C – 1100 °C – > 1652 °F – 2012 °F

* Standard values of **BEADMAKING 104®** glass sticks; they can act as reference points and do not represent guaranteed product features. In individual cases, testing for suitability before use is recommended.

Methods for achieving striking and reducing effects:

- Working with a neutral flame
- Making use of color nuances by striking
- Working with a reducing flame with virtually no oxygen
- Working with a slightly reducing flame

Opaque colors



Transparent colors



To see more of our colors, please feel free to take a look at www.kuglercolors.de
The **minimum ordering quantity** is 2,5 kg for every individual color.