

### Glass ampoules as primary packaging for numerous drugs

With special expertise in the field of pharmaceutical ampoules we are available to you around the world as a highly competitive supplier and partner. Even our standard range offers you a wide variety of top-calibre products in high-quality type I pharma glass (EP/USP/JP compliant). You can choose between:

- Flint and amber glass ampoules
- Filling capacities from 1 to 30 ml
- Straight-stem, funnel-type and closed ampoules (ISO types B, C and D as well as customised special shapes)
- Various break systems such as OPC (One Point Cut), CBR (Colour Break Ring) and Score Ring.

A wide variety of options are available to complement this range. These enable us to match the type and properties of our ampoules to your special requirements and wishes in many regards – and well in excess of the ISO norms:

- Optimised machine-running properties for high-performance filling operations
- Targeted minimisation and consistency of opening force
- Special treatment with ammonium sulphate for greater surface resistance (see page 6.2)
- Inner surface siliconisation to provide a slide coating for optimum emptying of the ampoules
- Optimised designs for lyophilisation
- Customised ceramic printing with heavy-metal-free inks
- Identification with up to three coloured code rings.

In this field, as in all its production operations, Gerresheimer attaches particular importance to innovative technologies. Often in partnership with our customers we continuously develop and refine these across the entire process chain. The quality of our ampoules is monitored at every stage of the ongoing production process by state-of-the-art in-line camera systems – right through to complete inspection of the printing.

