SCHOTT ampoules made of glass
Ampoules for the highest pharmaceutical requirements

The most widely used packaging solutions worldwide

Ampoules offer special benefits:
The medication is only in contact with the glass and the packaging is 100% tamper-proof. Excellent raw materials along with our glass expertise enable us to produce consistent high quality ampoules that meet the most demanding pharmaceutical requirements.

Product portfolio

SCHOTT produces a broad variety of ampoules according to ISO specifications or specifically designed products from 1 ml to 50 ml in clear or amber glass and with different break systems. Several color rings can be placed on the stem or body for identification purposes. Printed ampoules can be supplied with colors free of heavy metals. Our products meet the international requirements of the pharmaceutical industry such as EP, USP, and JP.

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Excellent production performance on the filling lines

SCHOTT ampoules are made of premium quality tubing glass

The excellent properties of SCHOTT Fiolax® glass tubing enable us to produce ampoules with an outstanding process capability designed for high-speed filling lines:

- Excellent barrier properties
- Hydrolytic resistance
- High chemical resistance
- Light protection
- Excellent cosmetic properties
- Tight tolerances in diameter and thickness
- Compliance with USP, EP, and JP

State-of-the-art production technology and 100% inspection

Quality is the most important driver to improve our customers’ production yield. Our expertise in glass converting in combination with our qualified workforce ensures the consistent high quality level of our products. SCHOTT ampoules are manufactured on high-tech production equipment with the latest on-line inspection systems. In addition, they are packed in a protected environment to avoid contamination.

**Forming process**

High-precision forming technology is combined with our proven glass expertise to guarantee the superior quality of our products and a high process capability. Our high-tech equipment is continuously updated to keep pace with technological advances and market demands. Extensive know-how exchange within our group worldwide ensures the continuous improvement of our processes.

**100% Inspection**

All important dimensional parameters are 100% inspected during manufacturing with highly advanced automated inspection systems. Color printing, text and cosmetic defects can be 100% inspected with camera systems on demand.

**Statistical In-process Inspection (SPC)**

Easy and quick interpretation of detailed, real-time manufacturing data by continuous process monitoring allows for efficient performance tracking and quality optimization.

**Packing process**

SCHOTT ampoules are packed in a confined environment to protect them against contamination.
A quality driven organization for your benefit

- cGMP is a strict guideline of our production process
- Compliance with the international standards USP, EP, and JP
- Rigorous quality assurance system
- Permanent process optimization by Six Sigma and TPM
- Continuous training of the employees
- ISO 9001, ISO 14001 and ISO 15378 certification
- Drug master file available

Break Systems

One Point Cut (OPC)
A small incision (cut) is placed in the constriction of the ampoule with a disc. A small colored dot marks the position of the breaking cut.

Color Break Ring (CBR)
A colored enamel ring is applied around the constriction with a disc.

Scoring (SCO)
A disc marks the glass surface all around the constriction.
Benefits of SCHOTT ampoules

• More than 125 years of experience in glass technology and glass converting
• Highest dimensional and cosmetic quality
• No or reduced incoming inspections
• Excellent yield and productivity on the filling lines
• Reduced rejection in the filling process and in final inspection
• Maximum protection of the product in the container

A market leading position through worldwide presence

With SCHOTT, our customers receive a global partner, able to deliver ampoules, vials, cartridges and syringes from four continents. The back-up possibilities offered by our production sites spread all over the world provide flexibility, reliability and security to our partners.

Customer orientation

SCHOTT offers tailor-made solutions for specific quality requirements. We also support our customers by developing new solutions and process improvements.