

StandardLine Ampoules

Pharmaceutical ampoules always in line with evolving industry standards

- Dimensional inaccuracies can lead to difficulties during filling or put container closure integrity at risk.
- Cosmetic properties are highly relevant to inspectability and may lead to high reject rates during fill-and-finish.
- Chemical resistance is crucial to keep drug-container interactions at a minimum.
- To deal with high pharmaceutical standards and to secure patient safety, SCHOTT StandardLine Ampoules offer the minimum cosmetic AQLs* according to the current Defect Evaluation List (the most relevant industry standard) and are aligned with the current PDA Technical Report.



Tightness of AQLs









Formats according to current version of ISO 9187-1, including forms B, C and D



Manufactured according to cGMP



Tight dimensional control

Tight cosmetic control



Unlimited shelf life for glass**



Uses SCHOTT FIOLAX® clear or amber*** glass tubing



Break-systems: One-point-cust (OPC), easyOPC, or Score-ring (SCR) recommended

High chemical resistance Made with SCHOTT FIOLAX® Type I Borosilicate Glass to keep drug-container interaction to a minimum

Efficient fill-and-finish

Tight tolerances ensure high container closure integrity for fill-and-finish

Low reject rate High cosmetic quality provides a low reject rate and high inspectability

* Acceptance Quality Level: Statistical measurement of the maximum acceptable number of defective goods in a particular sample size.

** Limitations may come from secondary packaging

*** For further details on SCHOTT FIOLAX®, see Tubing data sheet

SCHOTT PHARMA

Release tests

Dimensions

Defined parameters in drawing determine testing

In-line inspection

- 100% by camera/sensor
- Defined standard parameters: total length, stem eccentricity bulb diameter, steam diameter, steam diameter at sealing point, constriction diameter
- Other parameters include: bottom, OPC dot diameter, color break ring width, coding ring width

Statistical off-line inspection:

- Minimum inspection level S-4, according to ISO 9178-1 standard
- · Standardized global test methods based on different quality aspects. such as off-line camera, profile projector, caliper
- Defined standard parameters, such as break-force, bottom radius, head wall thickness, constriction wall thickness

ISO 9187-1

Dimensions, brimful



OPC One Point Cut	OPC and easyOPC – ISO 9187-2			sco Scoring	Breakforce SCO & CB	CBR Color Break Ring	
	1 ml – 3 ml	24-65 N	24-45 N		1 ml – 5 ml	30-80 N	
	5 ml	30-70 N	30-60 N		10 ml	30-90 N	
	10 ml – 30 ml	30-80 N	30-65 N*		20 ml – 30 ml	30-100 N	

* available from 1-20 ml

Chemical

Hydrolytic resistance surface testing according Pharmacopeiae (USP, Ph. Eur.) and ISO 4802-2

Scoring	Breakforce SCO 8	Color Break Ri	
\mathbb{A}^{r}	1 ml – 5 ml	30-80 N	Ľ
	10 ml	30-90 N	
	20 ml – 30 ml	30-100 N	

Verifications: A global manufacturing network paired with outstanding hot forming experience and a continuous drive for innovation

- For 130 years we have advanced the world of glass with ☆ groundbreaking innovations such as Borosilicate Glass
- We fuel science and inspire progress in hot forming Ø with dedicated competence centers
 - We offer supply security along the entire value chain thanks to vertical integration with the leading borosilicate tubing manufacturer
- Our global manufacturing footprint with 16 production sites shares equivalent quality standards and ensures global supply chain resilience

More than 250 production patents prove our continuous innovation and improvement

We provide our customers with state-of-the-art quality and inspection technologies

> Many standard ampoules configurations are available.

Contact your local sales representative for more

information.

General ordering information

Quality level	StandardLine							
Form	B, C and D*							
Break-system	OPC or easyOPC, SCO**							
Optional painting	More than 10 colors available for ID rings, OPC dot, text or logos							
Packaging	Tray, optionally ETO sterilized (for D-Ampoules out of Mexico)							
Palletizing*	A standard Euro Pallet (1,200 x 800 mm) contains 7 – 17 layers of 12 trays each							
Formats	1 ml	2 ml	3 ml	5 ml	10 ml	20 ml	25 ml	30 ml
Pieces per tray*	525	525	377	275	189	144	116	224

* Contact us for more information regarding ISO dimensions

** CBR available upon request

schott-pharma.com/ampoules

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carbon neutral

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