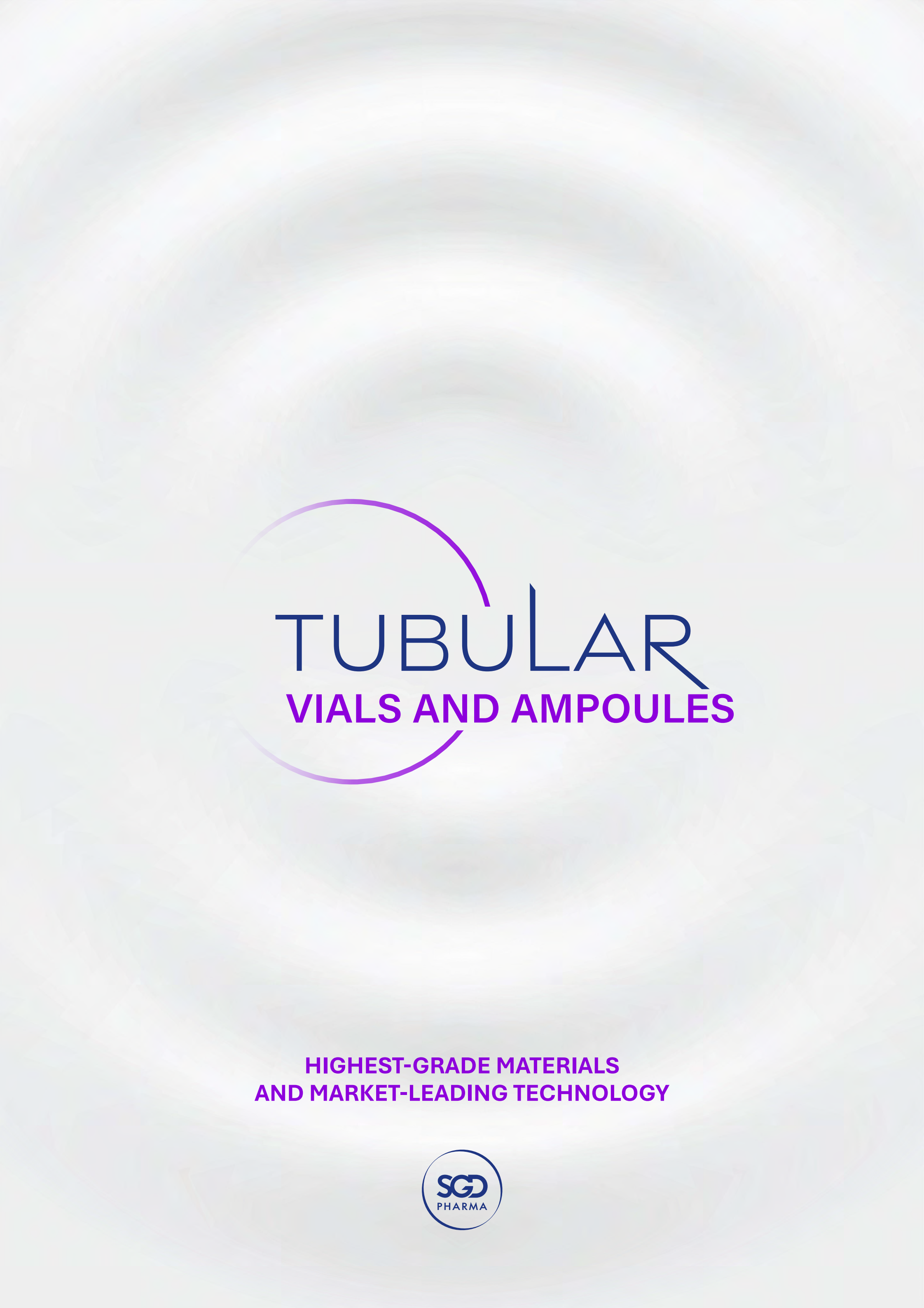


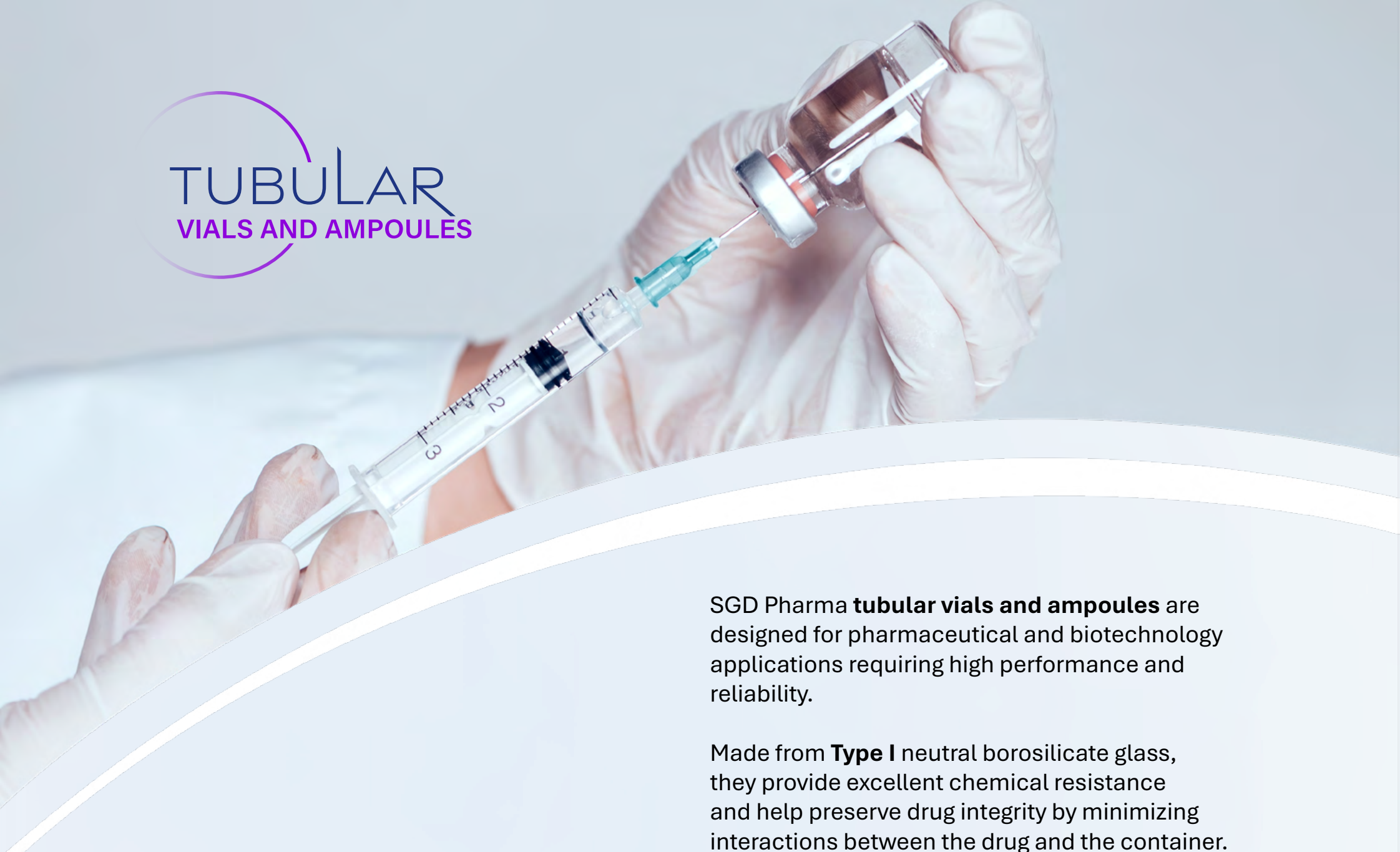


TUBULAR

VIALS AND AMPOULES

**HIGHEST-GRADE MATERIALS
AND MARKET-LEADING TECHNOLOGY**





Tubular Glass Solutions designed to perform

SGD Pharma **tubular vials and ampoules** are designed for pharmaceutical and biotechnology applications requiring high performance and reliability.

Made from **Type I** neutral borosilicate glass, they provide excellent chemical resistance and help preserve drug integrity by minimizing interactions between the drug and the container.

Designed for **parenteral applications**, the portfolio includes both standard and customized solutions, such as optimized vial bottoms for lyophilization and optional external siliconization for ampoules.

Supported by a strategic joint venture with **Corning** for tubing glass production, SGD Pharma delivers consistent quality, robust innovation, and a secure global supply chain.

Why tubular glass packaging?

- Superior chemical resistance**
Minimizes drug-container interactions
- High dimensional precision**
Ensures reliable filling and sealing
- Enhanced product protection**
Preserves formulation stability over time
- Design flexibility**
Supports a wide range of applications
- Global pharmaceutical compliance**
Meets major international GMP standards



Enabling the next generation of tubular packaging

New therapies require high-performance primary packaging solutions that ensure:

- Low particle levels**
- High chemical inertness / biocompatibility**
- Low extractables and leachables (E&L)**

SGD Pharma tubular glass primary packaging is designed to meet these requirements delivering the highest quality and compliance standards.

Product range

Vials
Type I - compliant with USP, EP, and JP requirements, ISO formats from 2R to 100R and non-standard formats. Available in *Velocity* configuration.

Neck finish
ISO 13, ISO 20, screw, EBB, and ABB.

Ampoules
Type I - USP, EP, and JP compliant available in ISO 9187-1 Shapes B, C, D, and E (Marzocchi); optional printing.

Breaking systems
Code ring, OPC, Score break, bottom breaking, color break.

Targets and benefits

- Biotech**
Low extractables & leachables (E&L)
- High chemical inertness**
for reagents and samples
- Laboratory applications**
High thermal and mechanical stability



Full validated process to ensure consistent **pharmaceutical grade quality**

Vials	Formed using a rotary machine	Dimensional inspection	Annealing	Surface treatments (if required)	Automated or manual cosmetic inspection	Final packaging in polypropylene (PP) boxes, shrink-wrapped with plastic film
	Formed with dimensional inspection	Pre-annealing coating application	Decoration application (screen printing, code rings, OPC, etc)	Annealing furnace followed by cosmetic inspection using a vision system	Additional treatments (if required) – e.g. external siliconization or external brushing	Final packaging: 1 × plastic box (shrink-wrapped upon request)

TEST						
VIALS	✔ DIMENSIONAL	✔ COSMETIC	✔ BREAKING LOAD	✔ SILICONIZATION		✔ CONTAMINATION
	Automated dimensional check	Manual or automated cosmetic check	Breaking load testing	Siliconization check (if applicable)		Verification that the boxes are free from contamination
AMPOULES	✔ DIMENSIONAL	✔ HEIGHT	✔ END-OF-LINE	✔ MANUAL SAMPLING INSPECTIONS ON:		
	Automated dimensional inspection of the ampoule using a rotary vision system	Overall ampoule height inspection	End-of-line vision inspection of printing, color rings, and breakpoint	Cosmetic defects	Breaking load	Boxes free from contamination

From development to commercialization, our tubular vials and ampoules provide:

- Reliability
- Safety
- Performance

SGD Pharma,
your partner for tubular glass packaging

For more information, please visit our website
www.sgd-pharma.com