

SEALIAN

**PROTECT AND ADD VALUE
TO YOUR PHARMACEUTICAL PRODUCT.**





A **unique internal treatment** that adds functionalities to your vial and secures your supply chain by offering unmatched quality and flexibility.

Advanced protection for pharmaceutical products and patients

Upgrade your primary glass packaging for sensitive, aggressive and viscous drug products with SGD Pharma's internal treatment SEALIAN.

A micro layer of silicone is highly bonded to the internal glass surface of the vial, acting as a barrier coating to provide dual protection: preventing ion leaching from the glass into the drug product as well as blocking drug molecules from penetrating the glass primary packaging.

The internal coating enhances the functional performance of the glass vial while safeguarding the integrity of the sensitive therapeutic product inside.



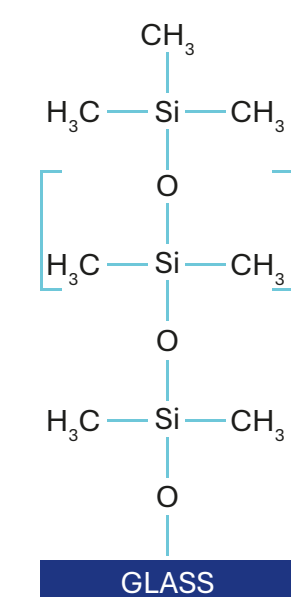
Sealian key benefits

Barrier effect

Leachables pose a toxicological and stability concern for several products, such as biological. Metal ion leachables can interact with proteins and lead to oxidation, fragmentation or aggregation.

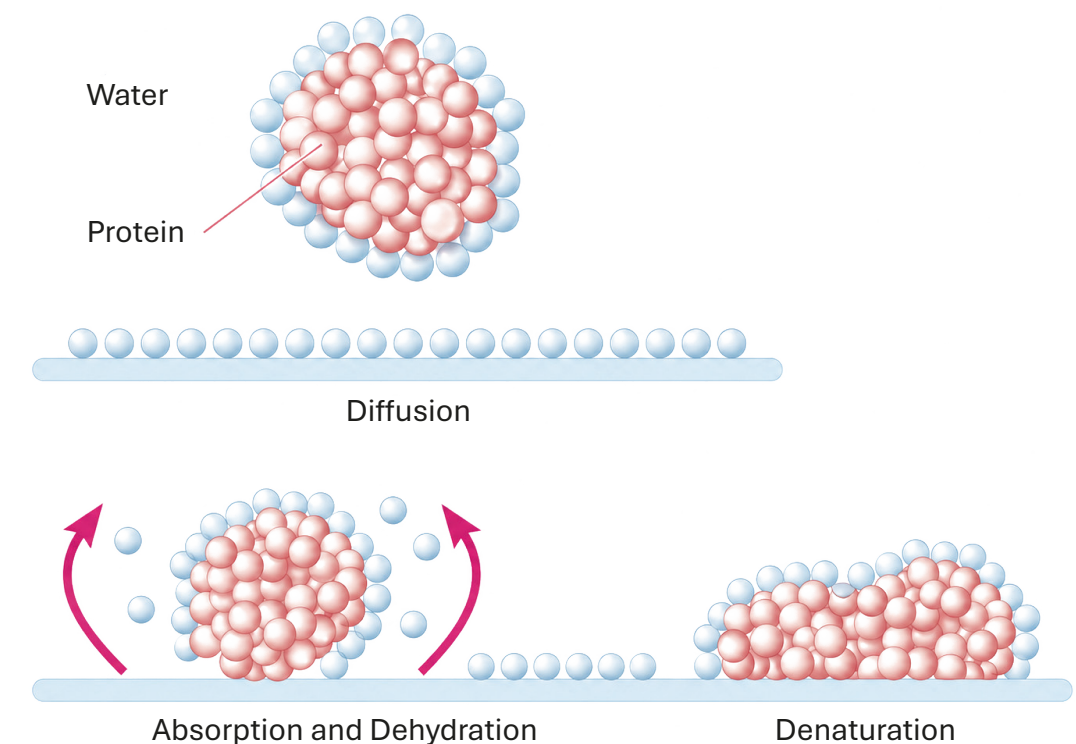
A barrier effect is created by the silicone coating which minimizes the interaction between the product and container and prevents ion leaching.

The treatment improves chemical durability for alkaline solutions (>pH7) and prevents aluminium leaching.



Limit protein adsorption

Results in improved dose accuracy and limits the need for over-concentration.



Hydrophobic properties

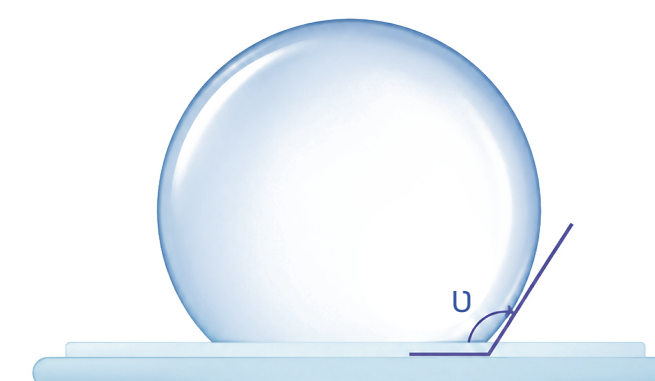
Prevention of high viscosity infusions from sticking to the internal vial surface, providing flawless transparency and easy inspection.

It also ensures a high restitution rate down to the last drop of product.

Drop of water on the glass surface



Non siliconized surface: $U < 90^\circ$



Siliconized surface: $U > 95^\circ$

Reconstituant factor

Faster dilution of powder with water for injection or other solutions.

Why choose us ?

SEALIAN treatment is suitable for all glass types with vial sizes from 3 mL to 500 mL, and from 2R to 10R, in both clear and amber glass, providing customers with a superior quality treatment and increased control of the production process, in line with SGD Pharma's high standards and the requirements of the pharmaceutical industry.

This process conforms to all pharmacopeia and undergoes stringent quality control within our manufacturing plants.

The SEALIAN treatment is ideal for a wide variety of market applications including: anti-infectives, parenteral nutrition, diagnostics, animal health and oncology to name a few.

Optimized process, elevated performance, unique quality level

Powered by the latest technology, our treatment process applies the internal coating to glass vials. The unique process ensures meticulous injection monitoring which reduces wastage and delivers multiple benefits, including:

01

Uniform coverage
of the whole surface

03

Precise
quantities

02

Dose
repeatability

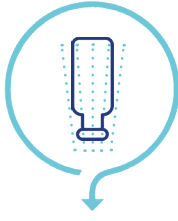
04

Limited risk
of dispersion
on the external surface

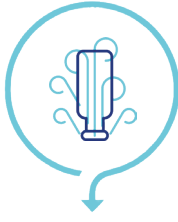
Process



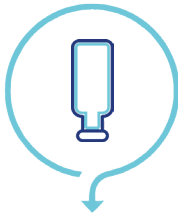
Loading



Washing
(Internal/External)



Drying
(Internal/External)



Emulsion spraying⁽¹⁾



Baking



Packing⁽²⁾



Palettisation

⁽¹⁾ Other packaging options available
⁽²⁾ PDMS



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