ASEPTCONN AG

PURESEAL®
seals

GROUPE efire



About us

Aseptconn is a leading supplier of components, products, software, and systems for sterile liquid technology, primarily in the pharmaceutical and biopharmaceutical sectors. With innovative products and expert advice, Aseptconn helps sustainably improve its customers' processes. Its extensive portfolio and diverse services make it the preferred supplier for many renowned international pharmaceutical companies.

Product Description:

Designed by Efire, PURESEAL® seals offer excellent resistance to creep and thermal cycling, ensuring reliable and long-lasting sealing performance for the pharmaceutical, cosmetic, and fine chemical industries.

Manufactured from high-purity modified PTFE using an innovative method, the PURESEAL® seal provides uniform compressibility across all faces of the TriClamp, offering excellent compensation for misalignments.

It is available in a wide range of models, perfectly tailored to your specific needs.

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PURESEAL® seals

Material

Purity

High-purity aseptic white seal, pigment-free, specifically developed to meet the requirements of the pharmaceutical, chemical, and food industries.

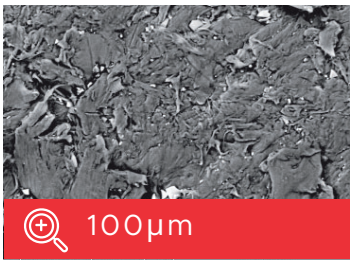
Developed by the R&D department of Eynard Robin

in collaboration with various laboratories.

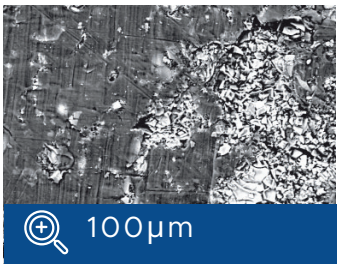
Full traceability of both material and manufacturing processes.

Homogeneity

The uniform distribution of fillers within PURESEAL® provides enhanced and consistent mechanical strength across all areas of the seal.
This ensures high reproducibility in the mechanical stability of the manufactured seals.
There is no need to add a high amount of fillers to increase its mechanical resistance.



PURESEAL®
Uniform and homogeneous structure.



Product B
Non-homogeneous structure

Flexibility and Adaptability

Eynard Robin manufactures PURESEAL® seals in all shapes and sizes (standard or custom) from single units to large production runs, within short lead times.
PURESEAL® seals are produced in Eynard Robin's own workshops.
All types of clamp seals (Type A, Type B), D-Ring, SMS, etc., are available.

Standards and Certifications

FOOD QUALITY - FDA - FOOD QUALITY

PHARMACOPEIA - USP Class VI - PHARMACOPEIA

ADI Animal Derived Ingredient free

CE

PURESEAL® seals
Implementation

Compression

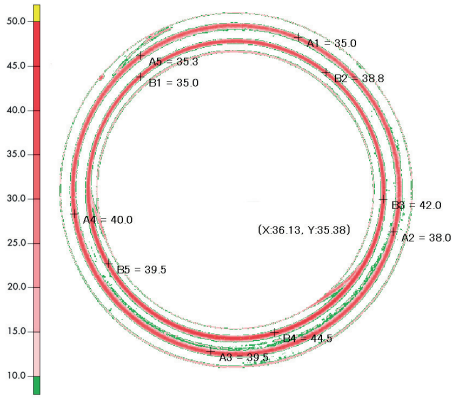
Thanks to its innovative design and manufacturing method, PURESEAL® compresses more easily than other seals on the market. It perfectly conforms to the shape of the groove and the Clamp ferrule.

Once the seal is tightened, the stress is distributed evenly around the entire circumference of the seal. Compression tests show that with simple hand-tightening of the Clamp ferrule collar, PURESEAL® can be compressed with relatively high stress values.

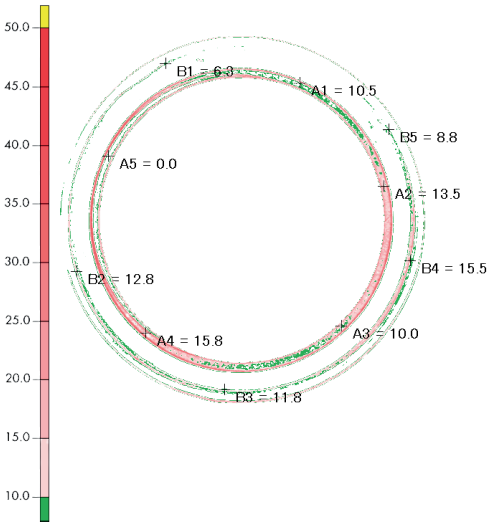
Other seals on the market show a lack of tightening force in several areas around the seal's circumference and relatively low compression stress values.

As part of its R&D projects, Eynard Robin conducts tests of its new products at CETIM.

PURESEAL® is the result of a new modified PTFE clamp seal, delivering many positive performance outcomes.



PURESEAL®
Homogeneous compression.
High clamping force around the entire circumference of the seal.



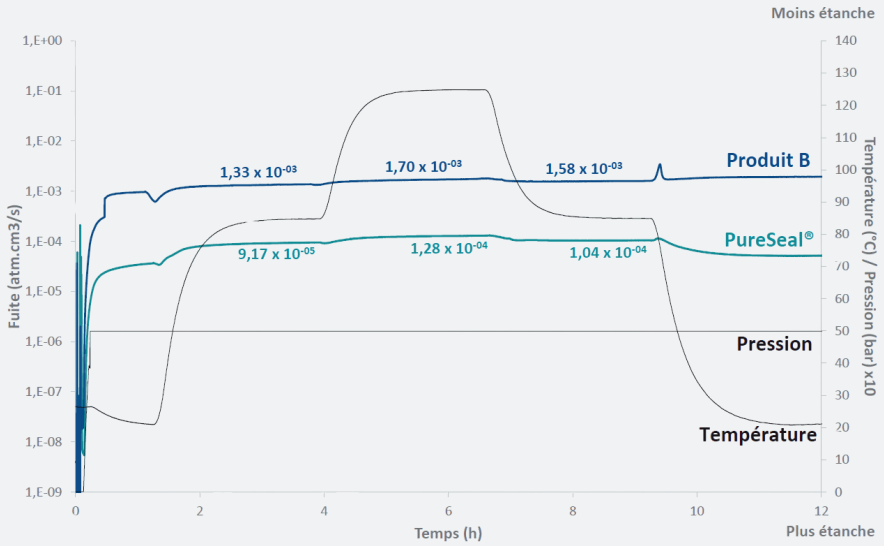
Product B
Non-homogeneous compression.
Insufficient clamping force in certain areas.

PURESEAL® seals
Performance

Excellent resistance to creep and cycling

The PURESEAL® seal and Product B seal were tested at CETIM in clamp ferrules under various temperature and pressure conditions. Helium leak tightness was monitored using a mass spectrometer.

The graph shows the leakage rate results under severe conditions: 3 temperature cycles (85°C > 130°C > 85°C).



Leak test performed on PURESEAL® seal and Product B seal at 5 bar helium pressure. Temperature cycle: (85°C > 130°C > 85°C).

We observe that:

- PURESEAL® is ten times more leak-tight than Product B.
- PURESEAL® delivers perfectly reproducible results (comparison of results obtained under different test conditions), which is not the case for Product B.
- The repeatability of the results and the stability of the seal demonstrate that PURESEAL® has excellent resistance to creep.

Reliable and durable sealing

- Extended service life, allowing longer intervals between maintenance cycles and reduced downtime.
- Exceptional adaptability to surface flatness imperfections of the sealing area.

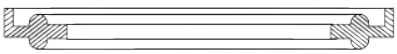
PURESEAL® seals

Features

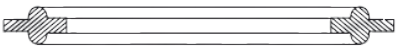
Features	Details
Composition	100% controlled homogeneous PTFE texture manufactured by compression molding.
Application Fields	Pharmaceutical, Cosmetic, Fine Chemistry
Operating Temperature	-200°C à +260°C
Usage	All fluids with pH 0–14 (gases, liquids). Resistant to all CIP/SIP treatments.
Color	White, without pigments or added additives
Certificates	FDA, USP Class VI, ADI Animal Derived Ingredient free, CE
Characteristics:	• Density calculated according to ASTM D-4894: 1.6 • Available with or without lips for perfect positioning on ferrules • Very good resistance to temperature variations • Seal dimensions conform to DIN 32676, DIN 11850, ISO 1127, ASME BPE • Homogeneous compressibility • Excellent elastic recovery • Excellent resistance to creep • Very low leakage rate

Products

It is possible to manufacture all types of parts based on drawings or models, with very precise manufacturing tolerances, up to ±0.1 mm. All dimensions can be adjusted according to your requirements.



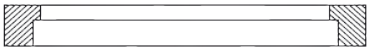
Joint Clamp type A



Joint Clamp type B



Joint D-Ring



Joint SMS L



Joint Torique