

Technical Report

SEPURAN® N₂

Stable Performance From Day One

STABLE PERFORMANCE FROM DAY ONE

SEPURAN® N₂ is a hollow fiber gas membrane that is used to produce nitrogen by removing oxygen from compressed air, resulting in N₂ purities between 95–99.5%. The polymer is tailored for nitrogen generation and a special post-treatment process of crosslinking enhances performance stability. Unlike other gas separation membranes, with typical decreases in performance over time, SEPURAN® N₂ membranes are characterized by an extremely stable performance.

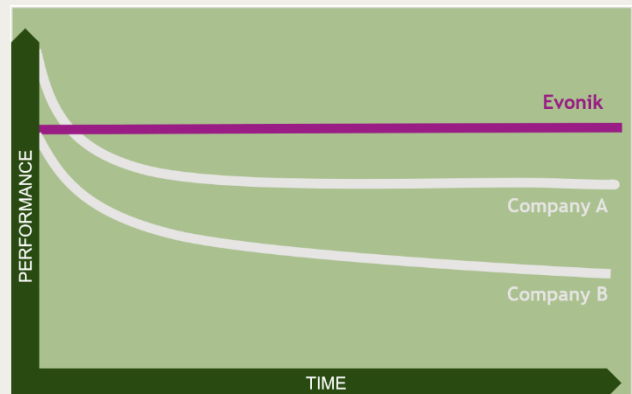
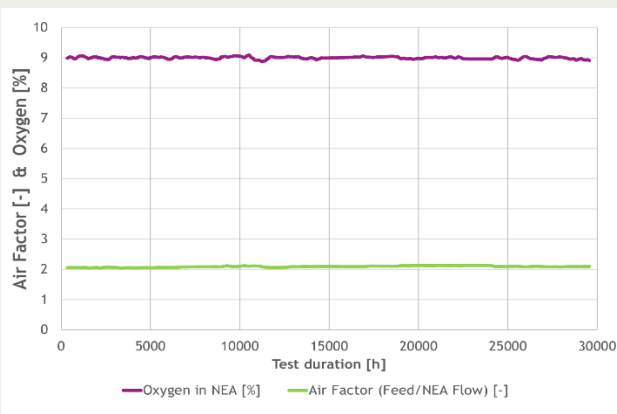
STABLE PERFORMANCE THROUGHOUT THE MEMBRANE LIFETIME

Onsite testing and monitoring of 4" SEPURAN® N₂ membranes showed that Evonik membranes give steady performance and do not age, regardless of operating conditions.

Onsite testing for 30,000 hours at high temperatures and for 8,500 hours at high pressures showed extremely stable performance regarding N₂ production and air consumption. No change in performance, flux, productivity or selectivity was observed. For your application, you can count on the original performance throughout the life of the membrane.

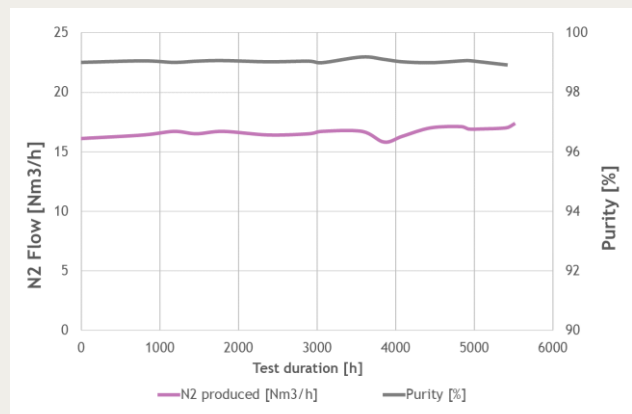
STABLE PERFORMANCE AT HIGH TEMPERATURE: DATA AT 3 BARG; 60°C; 30,000 HOURS

Long term operational data shows no significant change in flux/productivity or selectivity at 60 °C. The air consumption and N₂ production remains steady.



STABLE PERFORMANCE AT HIGH PRESSURE: DATA AT 12.5 BARG INLET; 99% N₂; 23°C; 5500 HOURS

Long term operational data shows no significant change in flux/productivity or selectivity at 12.5 barg. The air consumption and N₂ production remains steady.



This information and all technical and other advice are based on Evonik's present knowledge and experience. However, Evonik assumes no liability for such information or advice, including the extent to which such information or advice may relate to third party intellectual property rights. Evonik reserves the right to make any changes to information or advice at any time, without prior or subsequent notice.

EVONIK DISCLAIMS ALL REPRESENTATIONS AND WARRANTIES, WHETHER EXPRESS OR IMPLIED, AND SHALL HAVE NO LIABILITY FOR, MERCHANTABILITY OF THE PRODUCT OR ITS FITNESS FOR A PARTICULAR PURPOSE (EVEN IF EVONIK IS AWARE OF SUCH PURPOSE), OR OTHERWISE. EVONIK SHALL NOT BE RESPONSIBLE FOR CONSEQUENTIAL, INDIRECT OR INCIDENTAL DAMAGES (INCLUDING LOSS OF PROFITS) OF ANY KIND.

It is the customer's sole responsibility to arrange for inspection and testing of all products by qualified experts. Reference to trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used.

® = registered trademark

Evonik Fibres GmbH
Gewerbepark 4
4861 Schörfling/Austria

Phone +43 7662 6006-0
sepuran@evonik.com
www.membrane-separation.com
www.evonik.com/sepuran