

## FORBLUE™ S-SERIES

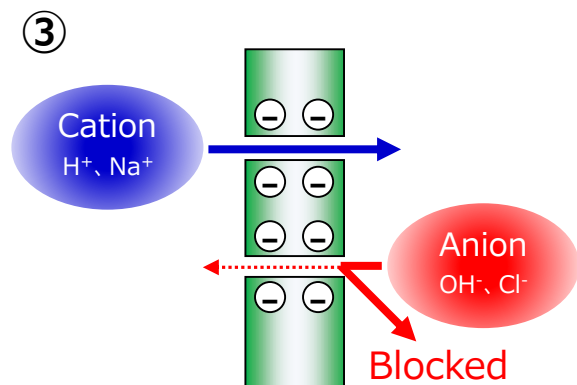
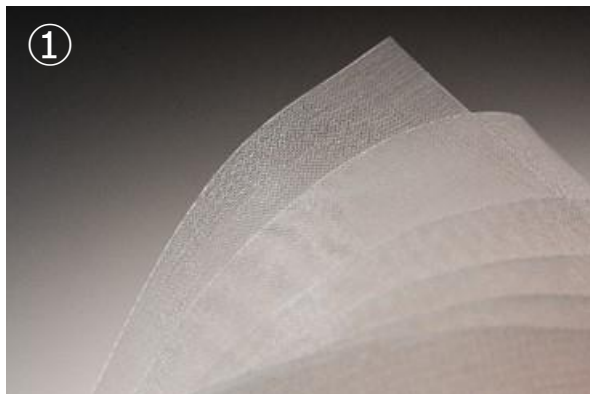
### Fluorinated cation exchange membrane for electrolysis and electro-dialysis

#### Overview

FORBLUE™ S-series is a fluorinated cation exchange membrane newly developed by AGC. It can be used for various kinds of electrolysis or electro-dialysis processes.

#### Features

- FORBLUE™ S-series is a cation exchange membrane with a sulfonic acid group.
- High cation selective permeability for effective electrolysis or electro-dialysis.
- All materials that make up the membrane (including the reinforcing fabric) are made from fluorinated resins - as a result robust chemical resistance is ensured.
- The membrane is reinforced by special PTFE fabric and has high strength and is easy to handle.
- We have several types (dry/wet) and grades of membrane.



- ① Appearance of Sx-2301DH.
- ② Sx-2301DH consists of a fluorinated resin with a sulfonic acid group ( $-\text{SO}_3^-$ ) and PTFE reinforced fabric. The fabric is covered with fluorinated resin layers on both sides.
- ③ Basic function of the membrane. It ensures very high ion selectivity.

## Properties

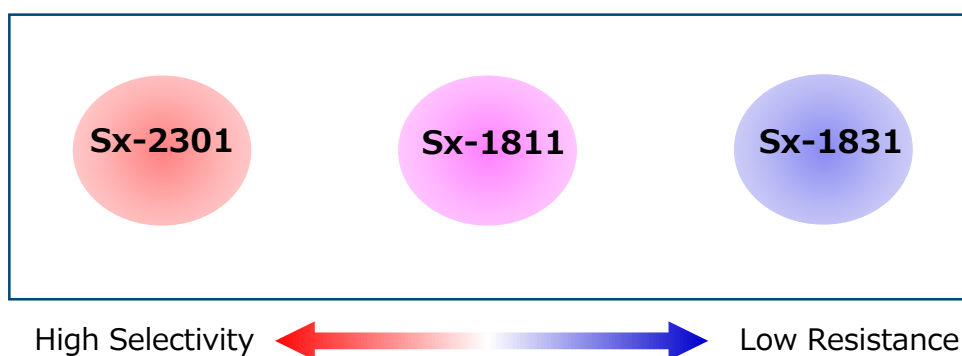
- We have three types of membrane with different ion exchange capacities.
- Dry and wet types are both available for Sx-2301.
- WN grade, a wet type membrane, is recommended if it is always in contact with any liquid.
- A counter ion can be replaced by a pretreatment.

Item	Unit	Sx-2301DH	Sx-2301WN	Sx-1811WN	Sx-1831WN
Counter ion	-	H <sup>+</sup>	Na <sup>+</sup>	Na <sup>+</sup>	Na <sup>+</sup>
Dry/wet	-	Dry	Wet	Wet	Wet
Thickness *1	μm	280	330	330	360
Ion exchange capacity	meq/g	1.0	1.0	1.1	1.25
Moisture content of polymer (H <sup>+</sup> type) *2	wt%	35	35	55	100

\*1 Values are test data, without guarantee. DH data shows dry state thickness and WN data show wet state thickness.

\*2 Evaluated the value after replacing the counter ion to H<sup>+</sup> and immersion in water, 100°C, 1hr.

## FORBLUE™ S series line-up



### NOTE

The statements and data given in this publication are believed to be accurate. They are presented without any guarantee or warranty, express or implied. Statements or suggestions regarding the use of these products are made without representation or warranty that all safety measures are indicated.

Please refer to the SDS (Safety Data Sheet) for safety and details.

This product is not designed for use in the implantation of the human body or for medical applications that come in contact with body fluid or body tissues, AGC carries out no test as to the fitness of the product for any medical applications.

The contents are subject to change without prior notice.