

June 2024



ZKSD-050

Anion Exchange Membrane

Anion exchange membranes are a type of polymer membrane containing basic groups, which have selective permeability to anions. These membranes are also known as ion-selective membranes. They consist of three parts: the polymer backbone with fixed groups (also known as the base membrane), positively charged groups (cations), and anions that can move freely on the active groups.

The ZKSD-050 anion exchange membrane is specifically designed for redox flow batteries. It has characteristics such as low resistance, high mechanical strength, high selectivity, and high stability.

Performance Parameters

ITEM	UNIT	VALUE
Membrane Type	—	Anion exchange membrane
Appearance	—	Yellow, transparent
Substrate	—	PET film
Counter Ion	—	Iodide ion
Dry Film Thickness	μm	50 ± 2
Ion Exchange Capacity (Cl ⁻)	mmol g ⁻¹	2.5~4
Area Resistance (Cl ⁻)	Ω cm ²	0.8~2.0
Conductivity (Cl ⁻)	mS cm ⁻¹	3~7
Water Uptake (25°C)	%	20~30
Swelling Ratio in NaCl (25°C)	%	0~6
Tensile Strength	MPa	30~45
Elongation at Break	%	25-55
Stability Range (25°C)	pH	1~13

Picture

