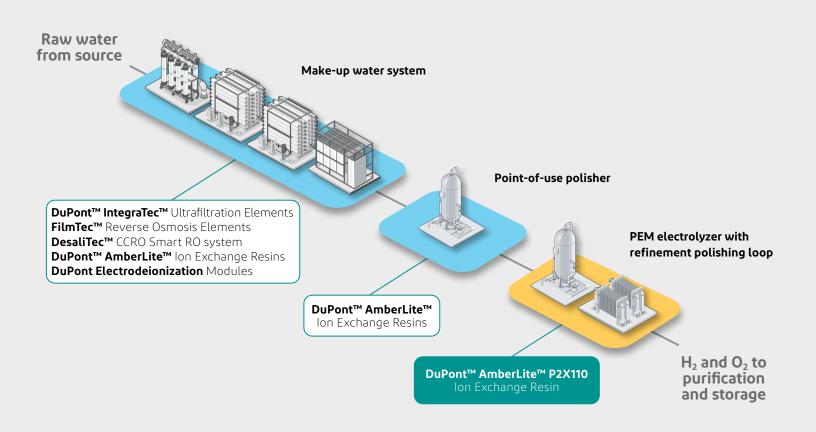


# **DuPont<sup>™</sup> AmberLite<sup>™</sup> P2X110**

The multifunctional mixed bed resin for PEM electrolyzers polishers



#### Polishers for the electrolyzer protection

Electrolyzer polishers are designed for the specific challenges associated with maintaining water purity within the Balance of Stack. To remove traces of impurities, the resin itself needs to be of high quality and purity while at the same time able to withstand thermal and chemical stress.

Using intentionally designed polishers with high quality  $DuPont^{TM}$  AmberLite ion exchange resins will help prevent the accumulation of impurities, even under the thermal and chemical stress of the loop.

### **DuPont Water Solutions**

At DuPont Water Solutions, we develop solutions that help meet the world's growing water and energy demands. Our diverse portfolio of technologies and solutions the broadest portfolio in the industry of core water treatment technologies addresses a broad range of water treatment applications and is designed to help you overcome water challenges to produce your desired quality and quantity of water. Our best in class technical team supported by R&D has accumulated decades of experience across all technologies to create solutions that address a broad variety of challenges.

## DuPont™ AmberLite™ P2X110 Ion Exchange Resin

## designed for PEM electrolyzer challenges

### The challenge

Proton Exchange Membrane (PEM) electrolyzers are known for their unique characteristics. Within the closed-loop system, electrolyzers can present a variety of water treatment challenges in the form of high temperatures, oxidants, leaching of materials from components in contact with water, and the occurrence of sulfonic acid, fluoride and metals. Effectively addressing these challenges can greatly enhance the overall efficiency of hydrogen generation.

#### The solution

AmberLite™ P2X110 is an ion exchange mixed bed formulation designed for the unique water chemistry of the electrolyzer

Featuring cleanliness and a robust construction designed to cope with the thermal and chemical challenges in the electrolyzer, this mixed bed recipe offers durable and reliable water quality while helping to prevent contaminant (e.g. silica, fluoride, metals) build-up in the electrolyzer loop. Thanks to the resin characteristics, this mixed bed formulation allows separability and transfer easiness to facilitate operational strategies. With an improved capacity specifically for the application, this product offers a robust option for your electrolyzer, with more service time and longer durability\* than industry-generic mixed bed resins.



Removal capacity (ions and silica)



Thermal and mechanical stability



Uniform particle size



**Purity and cleanliness** 

Maximized water quality for your electrolyzer with projectable performance

Robust operation to deliver 18MOhm water quality

Operation at high temperature up to 70°C

Ease-of-use mixed bed Easy to load, and transfer, fast start-up

Benefit to total cost of ownership Service time increase of up to 50% or higher compared to standard mixed bed resins\*.

\*Note: Refers to capacity-related service time, compared to standard mixed bed resins, under same water chemistry conditions and temperature Performance depends on the water chemistry found in the electrolyzer



Market Shaping Innovation



**Development** 



Collaborative Relationships



Local Expertise/ Global Markets



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