DUPONT™

Ion Exchange

Boiling Water Reactor

Condensate Polisher and Reactor Water Clean Up

The resins employed for boiling water reactor (BWR) purification must be able to purify water to a maximum degree. Any traces of organic and inorganic impurities will become problematic in the pure water environment of the reactor circuits. Our IRN-grade ion exchange resins are proven to be the premier resins chosen to protect nuclear power plants throughout the world, able to maintain the purity of the BWR circuit even in extreme temperature conditions.

PRODUCT	APPLICATION	FEATURES AND RECOMMENDED USES	TYPE	MATRIX	MINIMUM TOTAL VOLUME CAPACITY (eq/L)	IONIC FORM AS SHIPPED
DuPont™ AmberLite™ IRN99 H	CPP	AmberLite™ IRN99 H Resin is a premium 16% DVB uniform particle size cation resin with very high capacity and oxidative stability. The high oxidative stability reduces reactor water sulfate concentration in BWR condensate polishing.	SAC	GEL	2.50	H+
DuPont™ AmberLite™ IRN78 OH	CPP	AmberLite™ IRN78 OH is a premium high solids uniform particle size anion resin with very high capacity. It is specifically processed to minimize organic chloride content. Pairing with AmberLite™ IRN99 H offers the highest capacity and lowest sulfate with less-separating characteristics.	SBA	GEL	1.20	OH-
DuPont™ AmberLite™ IRN150 H/OH	CPP/RWCU	Nuclear grade mixed bed composed of uniform particle size AmberLite™ IRN77 H and IRN78 OH Resins on a 1:1 equivalent basis.	MB	GEL/GEL	1.90/1.20	H+/OH-
DuPont™ AmberLite™ IRN160 H/OH	CPP/RWCU	High-capacity nuclear grade mixed bed composed of uniform particle size AmberLite™ IRN97 H and IRN78 OH Resins on a 1:1 equivalent basis. Designed to minimize separation of anion and cation during installation and transfer in BWR condensate polishing.	MB	GEL/GEL	2.10/1.20	H+/OH-
DuPont™ AmberLite™ IRN170 H/OH	CPP/RWCU	Premium nuclear grade mixed bed composed of uniform particle size AmberLite™ IRN99 H and IRN78 OH Resins on a 1:1 equivalent basis. This highly recommended option offers maximum oxidative stability, the highest operating capacity to achieve the lowest reactor water sulfate concentration, the lowest separability, and the longest resin life for all BWR applications.	MB	GEL/GEL	2.50/1.20	H+/OH-

Key:

CPP = Condensate Polishing Plant
RWCU = Reactor Water Clean Up
SBA = Strong Base Anion
SAC = Strong Acid Cation
MB = Mixed Bed

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Powering performance worldwide.

With a large global manufacturing footprint, strong R&D expertise and technical support services and systems, we supply high market volumes with high quality. DuPont partners with you, our customer, to understand unmet needs and develop tailored solutions.

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Have a question? Contact us at:

www.dupont.com/water/contact-us

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