PX-SB1-OH-NG

Grade: Nuclear

Strong base type 1 anion resin, monodispersed polymeric gel, hydroxide form, nuclear grade

ResinTech PX-SB1-OH-NG is a monodispersed, Type 1 gel strong base anion resin in hydroxide form. PX-SB1-OH-NG is intended for use with deep bed condensate polishers, two-bed demineralizers, and mixed beds in nuclear and industrial applications where a resin tested to confirm high resistivity.

FEATURES & BENEFITS

- Highly uniform particle size
- Deep Bed Polisher
- Superior physical stability
- Gel structure

APPLICATIONS

- High Purity DI Water
- Condensate Polishing
- Ultrapure Water Production (UPW)
- Demineralization / DI
- Mixed Bed Components
- Silica Removal

PHYSICAL PROPERTIES

Polymer Matrix	Styrene/DVB
Polymer Type	Gel
Ionic Form (as shipped)	Hydroxide (OH^-)
Functional Group	Quaternary Ammonium Type 1
Physical Form	Spherical Beads
Uniformity Coefficient	1.10
Effective Particle Size	640 +/- 50 µm
< 50 mesh (300 µm) %	< 0.5%
Minimum Sphericity (%)	95
Reversible Swelling	18 to 25% (Cl → OH)
Capacity (meq/mL)	1.20
Moisture Retention (%)	40 - 45
Shipping Weight	41 - 43 lbs/cu.ft. (657 - 689 g/L)
Color	Amber

SUGGESTED OPERATING CONDITIONS

Maximum Temperature	140°F (60°C)
Minimum Bed Depth	24 in. (61.0 cm)
Maximum Pressure Loss	20 psi (138 kPa)
Backwash Expansion (%)	25 - 50
Operating pH Range	0 to 14
Flow Rate	
Working Service	1-10 gpm/cu.ft. (8-80 BV/h)

RESINTECH INC.
INNOVATIONS IN ION EXCHANGE

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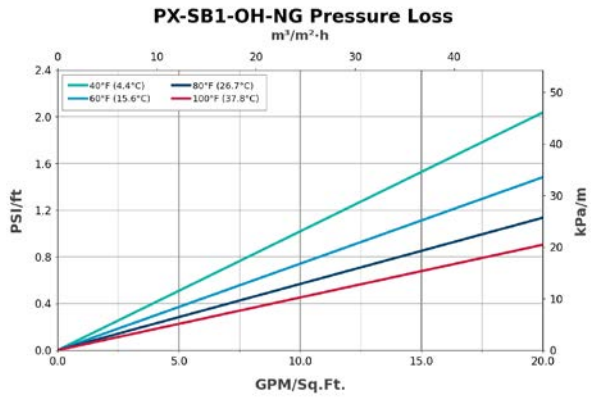
PX-SB1-OH-NG

REGENERATION DETAILS

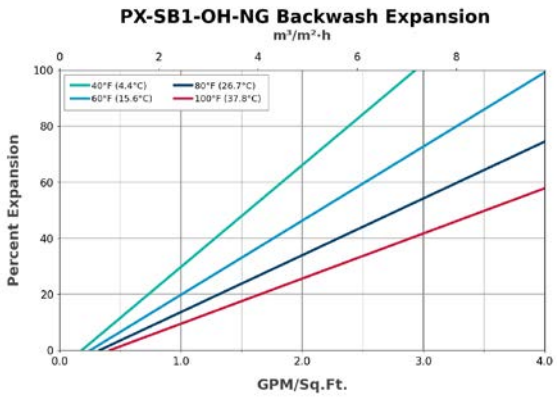
Hydroxide Cycle (NaOH)	2 to 6%	Displacement Volume	10-15 gals/cu.ft. (1-2 BV)
Displacement Flow Rate	Same as dilution water	Rinse Volume	Minimum of 30 gals/cu.ft. (4 BV)

PRESSURE LOSS



The graph above shows the expected pressure loss of ResinTech PX-SB1-OH-NG per foot of bed depth as a function of flow rate at various temperatures.

BACKWASH EXPANSION



The graph above shows the expansion characteristics of ResinTech PX-SB1-OH-NG as a function of flow rate at various temperatures.

Maximum Temperature (Non-regenerable): 140°F (60°C)

Maximum Temperature (Regenerable):212°F (100°C)

Conversion	95% OH min
Anionic Form CO_3	5% max
Anionic Form Cl	0.1% max
Anionic Form SO_4	0.1% max
Impurity Iron	50 ppm max
Impurity Sodium	20 ppm max
Impurity Heavy Metal	30 ppm max

DEMINERALIZATION

ResinTech PX-SB1-OH-NG can be used as the anion component in a variety of demineralization applications where a hydroxide form anion resin is coupled with a hydrogen form cation resin. Common configurations include separate beds, mixed beds and other more complicated arrangements. Regeneration is accomplished with dilute sodium hydroxide, heated when low silica leakage is desired.

CERTIFICATIONS

REACH Registered

PACKAGING

Standard

42 cu.ft. Supersack | 7 cu.ft. Drum
200L Drum | 1000L Supersack

Metric

1 cu.ft. Bag | 5 cu.ft. Drum
25L Bag | 140L Drum

Shipping Weight

41 - 43 lbs/cu.ft. (657 - 689 g/L)

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MATERIAL SAFETY DATA SHEETS (MSDS)

Material Safety Data Sheets (MSDS) are available for all products on the ResinTech website. They contain important health and safety information that may be needed to protect your employees and customers from any known health and safety hazards associated with our products. We recommend that you secure and study the pertinent MSDS for our products and any other products being used.

These suggestions and data are based on information we believe to be reliable. They are offered in good faith. However we do not make any guarantee or warranty. We caution against using these products in an unsafe manner or in violation of any patents; further we assume no liability for the consequences of any such actions.

Safety Data Sheets (SDS) are available at resintech.com

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