

SaniExchange 010 Na⁺ Form

NSF/ANSI 44 & 61 Food Grade Resin High Capacity Cation Exchange Resin

For Softening (Industrial and Residential) Applications

SaniExchange 010 Resin Media is a strongly acidic cation exchange resin containing sulphonic acid groups. It is specially designed for the treatment of foodstuffs, beverages, potable water, feeding water boilers and water used in food processing. Its specification is in compliance with the U.S. Food and Drug Administration's (USFDA) Code of Federal Regulations (CFR) Title 21, Paragraph 173.25, for use in the treatment of foods for human consumption. The **SaniExchange 010** Resin Media is also NSF Listed and WQA Gold Seal Certified under NSF/ANSI Standard 44 & 61

Weight: 25 liter bags

Typical Physical and Chemical Properties

Physical Form		Golden yellow-to dark brown spherical beads
Matrix		Styrene-divinylbenzene (DVB) copolymer, gel
Functional group		Sulfonic acid
Ionic form as shipped		Na⁺ form
Total volume capacity, min.	eq/lt kg/ft ³ as CaCO ₃	2.0 43.7
Moisture retention capacity	%	43-50
Particle size	%	(0.315-1.25 mm) ≥ 95 (<0.315 mm) ≤ 1
Uniformity coefficient, max.		1.7
Harmonic mean diameter	mm	0.40 – 0.60
Whole uncracked beads	%	95-100
Total swelling (Na ⁺ → H ⁺)	%	8
Particle density	gr/mL	1.28
Shipping density**	gr/lt lb/ft ³	830 51
Suggested Operating Conditions		
Maximum operating temperature		Na⁺ form ≤140°C (284°F)
pH range		0-14
Bed depth, min.		800 mm (31.5 inches)
Flow rates: Service/fast rinse		5-60 m/h (2-24 gpm/ft ²)
Backwash		See Figure 1
Co-current regeneration/displacement rinse		1-10 m/h (0.4-4 gpm/ft ²)
Counter-current regeneration/displacement rinse		5-20 m/h (2-8 gpm/ft ²)
Total rinse requirement		2-5 BV*
Regenerant		8-12% NaCl

*1 BV (Bed Volume) = 1 m³ solution per m³ resin or 7.5 gals per ft³ resin

**As per the backwashed and settled density of the resin, determined by ASTM D-2187



Certified to
NSF/ANSI 44 & 61



Food Additive Regulation 21
CFR § 173.25(a)(1).



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Warning: Oxidizing agents such as nitric acid attack organic ion exchange resins under certain conditions. This could lead to anything from slight resin degradation to a violent exothermic reaction (explosion). Before using strong oxidizing agents, consult sources knowledgeable in handling such materials

