



# CERTIFICATE Purolex PRC 108E Ion Exchange Resin

UAB "Chemsys"

Date: 21<sup>th</sup> of April 2022 Invoice №: 2202CMSLT03 PI №: 2202CMSLT03

#### 1. Description

Purolex PRC108E is a high purity premium grade, high capacity, gelular, sulfonated, polystyrene cation resin supplied in the sodium or hydrogen form as moist, tough, uniform, spherical beads, Purolex PRC108E is intended for use in all water softening, dealkalization, deionization and chemical processing applications,

#### 2. Typical Physical and Chemical Properties

#### **Parameter**

Polymer Matrix Structure	Crosslinked Polystyrene Divinylbenzene	
Physical Form and Appearance	Yellow to brown spherical Particle	
Functional Groups	R-SO3	
Ionic Form, as shipped	Na+	
Total Capacity, Na+ form, wet, volumetric	≥ 2,0 eq/l min	
Moisture Retention, Na+ form	43-48%	
Particle Size Range	0,3mm - 1,2mm	
<300 µm (max,)	1%	
Uniformity Coefficient (max.)	1,6	
Effective size	0,4-0,7mm	
Reversible Swelling	$Na^+ \rightarrow H^+ (max,)$	
Shipping Weight (approx,)	780 - 880g/l	
Specific Gravity, moist Na+ Form	1,29	
Temperature Limit	120°C (250 °F)	
pH Range, Stability	0 - 14	

#### 3. Suggested Operating Condition

#### **Parameter**

Maximum Temperature		120°C (248°F) max.	
		100°C (212°F) max.	
Backwash Rate		25 to 50% Bed Expansion	
Regenerant Concentration	Hydrogen Cycle	3% HCl or 2 to 3% H <sub>2</sub> SO <sub>4</sub>	
	Sodium Cycle	6% to 8% NaCl or 3% NaOH	
Regenerant dosage	HCl or H <sub>2</sub> SO <sub>4</sub>	HCl or H <sub>2</sub> SO <sub>4</sub> volume:resin volume 3:1	





Regenerant dosage	NaCl	NaCl volume:resin volume 2:1	
Regenerant dosage	NaOH	NaOH volume:resin volume 3:1	
Regenerant Flow Rate		2 to 4 BV/h	
Regenerant contact Time		at least 40 minutes	
Service Flow Rate		10-25m/h	

## 4. Application

It is used in water softening applications and Demineralization, good kinetic performance across a wide range of operating conditions while offering excellent chemical and physical stability.

## 5. This product is analogous to:

Amberlite IR-120 Dowex 50	KY2-8	Diaion SK-IB
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Director

Tomas Jankauskas