

PRODUCT DATA SHEET

Purolite™ CriticalResin™ NRW3560XLCLi7

Polystyrenic Macroporous, Gel,
Cation / strong base anion, Lithium 7
: Hydroxide form, 1:1 equivalent
Mixed Bed, Extra Low Chloride,
Nuclear Grade

PRINCIPAL APPLICATIONS

- Primary coolant purification
- High Boron and Lithium coolant

ADVANTAGES

- Excellent physical and chemical stability
- Minimal chloride release
- Highly converted to the Lithium7 and Hydroxide form
- Low organic extractables and rinseables
- High operating capacity

* Shelf life of 12 months

SYSTEMS

- CVCS online bed

TYPICAL PACKAGING

- 1 CF Box
- 5 ft³ Drum (Fiber)

TYPICAL PHYSICAL & CHEMICAL CHARACTERISTICS:

Appearance	Spherical Beads	
Particle Size Range	425 - 1200 µm	
< 425 µm (max.)	2 %	
Uniformity Coefficient (max.)	1.7	
Impurities Iron (max.)	50 ppm	
Impurities Sodium (max.)	30 ppm	
Impurities Heavy Metals (max.)	40 ppm	
Shipping Weight (approx.)	720 - 750 g/L (45.0 - 46.9 lb/ft³)	
Temperature Limit, Non-Regenerable Bed	100 °C (212.0 °F)	
Temperature Limit, Regenerable Bed	60 °C (140.0 °F)	
Component Name	Lithium7 Macroporous Strong Acid Cation	Gel Strong Base Anion
Polymer Structure	Macroporous polystyrene crosslinked with divinylbenzene	Gel polystyrene crosslinked with divinylbenzene
Functional Group	Sulfonic Acid	Type I Quaternary Ammonium
Ionic Form	⁷ Li ⁺ form	OH ⁻ form
Cation / Anion Chemical Equivalent Ratio	1	1
Total Capacity (min.)	2.1 eq/L (⁷ Li ⁺ form)	1.1 eq/L (OH ⁻ form)
Conversion (min.)	99.9 % (⁷ Li ⁺ form)	95 % (OH ⁻ form)
Anionic Form, CO ₃ ²⁻ (max.)	5 %	
Anionic Form, SO ₄ ²⁻ (max.)	0.1 %	

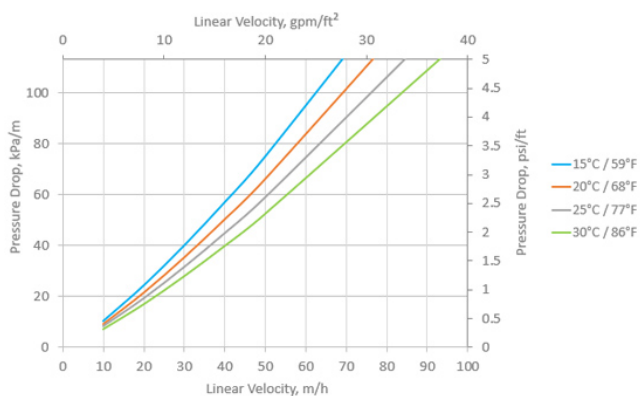
Anionic Form, Cl ⁻ (max.)	0.05 %	
Specific Gravity	1.24	1.08

Hydraulic Characteristics

PRESSURE DROP

The pressure drop across a bed of ion exchange resin depends on the particle size distribution, bed depth, and voids volume of the exchange material, as well as on the flow rate and viscosity of the influent solution. Factors affecting any of these parameters—such as the presence of particulate matter filtered out by the bed, abnormal compressibility of the resin, or the incomplete classification of the bed—will have an adverse effect, and result in an increased head loss. Depending on the quality of the influent water, the application and the design of the plant, service flow rates may vary from 10 to 40 BV/h.

PRESSURE DROP ACROSS RESIN BED



Ecolab is a global developer, manufacturer, and supplier of Purolite™ Resins including ion exchange, catalyst adsorbent and advanced polymers that make the world cleaner and healthier.

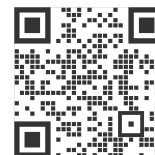
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