

# Purolite® NRW3240

Nuclear Grade Mixed Bed Resin

PRODUCT DATA SHEET

**Purolite NRW3240** nuclear grade mixed bed resin is an equivalent mix of gel cation and a porous gel anion resins prepared for use in polishing water within nuclear power operations. Use in radwaste systems is also recommended. This product is designed for non-regenerable applications; however use in regenerated systems is applicable.

**Purolite NRW3240** is available in natural Lithium 6 and high purity Lithium 7 form.

Purolite nuclear grade resins meet standards specified for all nuclear markets.

## Typical Physical and Chemical Characteristics

Application	Primary polishing and clean-up systems	
Polymer Structure	Gel polystyrene crosslinked with divinylbenzene	
Appearance	Spherical Beads	
Functional Group	Sulfonic Acid and Type 1 Quaternary Ammonium	
Ionic Form as Shipped	H <sup>+</sup> /OH <sup>-</sup>	
Component	Gel Strong Acid Cation	Gel Type 1 Strong Base Anion
Cation / Anion Chemical Equivalent Ratio	1	1
Total Capacity (min.)	1.8 eq/l (H <sup>+</sup> form)	1.0 eq/l (OH <sup>-</sup> form)
Conversion (min.)	99.9 % (H <sup>+</sup> form)	95 % (OH <sup>-</sup> form)
Anionic Form, CO <sub>3</sub> <sup>-</sup> (max.)		5 %
Anionic Form, Cl <sup>-</sup> (max.)		0.1 %
Anionic Form, SO <sub>4</sub> <sup>-</sup> (max.)		0.1 %
Specific Gravity	1.20	1.07
Impurities Iron (max.)	50 ppm	
Impurities Sodium (max.)	30 ppm	
Impurities Heavy Metals (max.)	40 ppm	
Particle Size Range	425 - 1200 µm	
Uniformity Coefficient (max.)	1.7	
Shipping Weight (approx.)	705 - 740 g/l (41.1 - 46.3 lb/ft <sup>3</sup> )	
Temp Limit, Non-Regenerable Bed	100°C (212°F)	
Temp Limit, Regenerable Bed	60°C (140°F)	



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