

PRODUCT DATA SHEET

Purolite® NRW505

Polystyrenic Macroporous, Type I
Strong Base Anion Resin, Hydroxide
form, Nuclear Grade

PRINCIPAL APPLICATIONS

- Steam Generator blowdown purification
- CVCS Deborating of Primary coolant
- Primary coolant polishing
- Radwaste decontamination
- Mixed Bed anion component

TYPICAL PACKAGING

- 1 CF Box
- 5 ft³ Drum (Fiber)

ADVANTAGES

- Highly selective for Boron
- Highly converted to hydroxide form
- Minimal residual chlorides and sulfates
- Minimal residual metals
- Low organic extractables and
rinseables

TYPICAL PHYSICAL & CHEMICAL CHARACTERISTICS:

Polymer Structure	Macroporous polystyrene crosslinked with divinylbenzene
Appearance	Spherical Beads
Functional Group	Type I Quaternary Ammonium
Ionic Form	OH ⁻ form
Total Capacity	0.9 eq/L (19.7 Kgr/ft ³) (OH ⁻ form)
Moisture Retention	53 - 58 % (Cl ⁻ form)
Particle Size Range	425 - 1200 µm
< 425 µm (max.)	2 %
Uniformity Coefficient (max.)	1.7
Conversion (min.)	95 % (OH ⁻ form)
Impurities Iron (max.)	50 ppm
Impurities Sodium (max.)	20 ppm
Impurities Heavy Metals (max.)	30 ppm
Anionic Form, CO ₃ ²⁻ (max.)	5 %
Anionic Form, SO ₄ ²⁻ (max.)	0.1 %
Anionic Form, Cl ⁻ (max.)	0.1 %
Specific Gravity	1.09
Shipping Weight (approx.)	680 - 720 g/L (42.5 - 45.0 lb/ft ³)
Temperature Limit, Non-Regenerable Bed	100 °C (212.0 °F) (OH ⁻ form)
Temperature Limit, Regenerable Bed	60 °C (140.0 °F) (OH ⁻ form)



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