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Purolite A400OH

Polystyrenic Gel, Strong Base Anion Resin, Hydrogen form

PRINCIPAL APPLICATIONS
Demineralization - Industrial Water
Silica Removal

ADVANTAGES
High operating capacity
Efficient regeneration
Exceptional physical stability
Good kinetic performance

SYSTEMS
Mixed bed demineralizer
Layered Beds

REGULATORY APPROVALS
IFANCA Halal Certified
LPPOM MUI Halal Certified

TYPICAL PACKAGING
1 ft³ Sack
25 L Sack
5 ft³ Drum (Fiber)

TYPICAL PHYSICAL & CHEMICAL CHARACTERISTICS:
Polymer Structure Gel polystyrene crosslinked with divinylbenzene
Appearance Spherical Beads
Functional Group Type I Quaternary Ammonium
Ionic Form OHTotal
Capacity (min.) 1.3 eq/L (28.4 Kgr/ft³) (Cl^- form)
Moisture Retention 48 - 54 % (Cl^- form)
Particle Size Range 300 - 1200 µm
< 300 µm (max.) 1 %
Uniformity Coefficient (max.) 1.7
Reversible Swelling, $Cl^- \rightarrow OH^-$ (max.) 30 %
Specific Gravity 1.07
Shipping Weight (approx.) 665 - 695 g/L (41.6 - 43.4 lb/ft³)
Temperature Limit 100 °C (212.0 °F) (Cl^- form)
Temperature Limit 60 °C (140.0 °F) (OH^- form)

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Hydraulic Characteristics

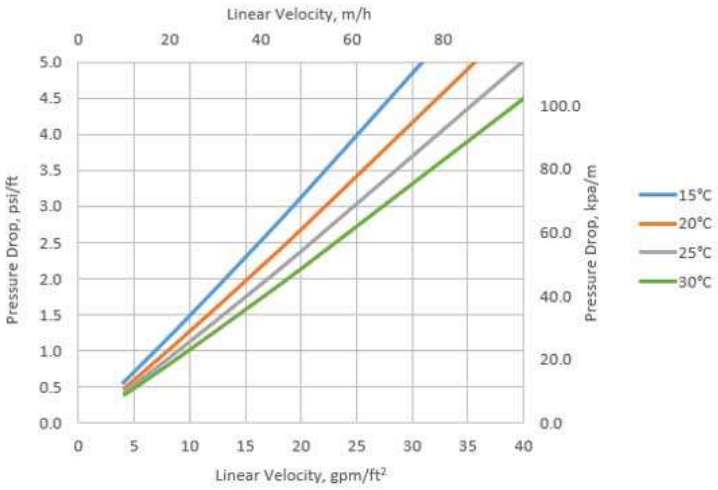
BACKWASH

During up-flow backwash, the resin bed should be expanded in
volume between 50 and 70% for at least 10 to 15 minutes. This
operation will free particulate matter, clear the bed of bubbles and
voids, and reclassify the resin particles ensuring minimum resistance to flow. When first putting into service, approximately
30 minutes of expansion is usually sufficient to properly classify
the bed. It is important to note that bed expansion increases with
flow rate and decreases with influent fluid temperature. Caution
must be taken to avoid loss of resin through the top of the vessel
by over expansion of the bed.

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.

BACKWASH EXPANSION OF RESIN BED



PRESSURE DROP ACROSS RESIN BED