PRODUCT DATA SHEET

Purofine® PFA300

Polystyrenic Gel, Type II Strong Base Anion Resin, Chloride form, Uniform Particle Size

PRINCIPAL APPLICATIONS

• Demineralization - Industrial Water

ADVANTAGES

- High operating capacity
- High regeneration efficiency
- Uniform particle size

REGULATORY APPROVALS

 Certified by the WQA to NSF/ANSI-61 Standard

TYPICAL PACKAGING

- 1 ft³ Sack
- 25 L Sack
- 5 ft³ Drum (Fiber)
- 1 m³ Supersack
- 42 ft³ Supersack

TYPICAL PHYSICAL & CHEMICAL CHARACTERISTICS:

| Polymer Structure | Gel polystyrene crosslinked with divinylbenzene |
|---------------------------------------|---|
| Appearance | Spherical Beads |
| Functional Group | Type II Quaternary Ammonium |
| Ionic Form | Cl⁻ form |
| Total Capacity | 1.4 eq/L (30.6 Kgr/ft³) (Cl ⁻ form) |
| Moisture Retention | 40 - 45 % (Cl ⁻ form) |
| Mean Diameter | 570 ± 50 μm |
| Uniformity Coefficient | 1.1 - 1.2 |
| Reversible Swelling, Cl⁻ → OH⁻ (max.) | 20 % |
| Specific Gravity | 1.09 |
| Shipping Weight (approx.) | 675 - 700 g/L (42.2 - 43.8 lb/ft³) |
| Temperature Limit | 85 °C (185.0 °F) (Cl ⁻ form) |
| Temperature Limit | 35 °C (95.0 °F) (OH⁻ form) |
| | |



Hydraulic Characteristics

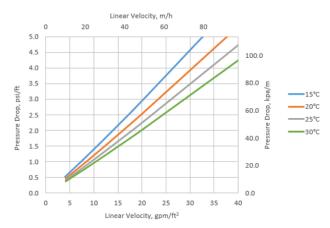
PRESSURE DROP

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.

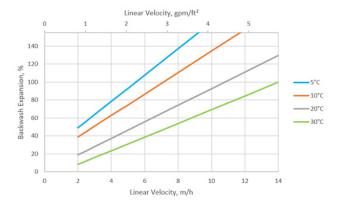
BACKWASH

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 ACROSS RESIN BED



BACKWASH EXPANSION OF RESIN BED





The statements, technical information and recommendations contained herein are believed to be accurate as of the date hereof. Since the conditions and methods of use of the product and of the information referred to herein are beyond our control, Purolite expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information; NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE GOODS DESCRIBED OR THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be applicable when such product is used in combination with other materials or in any process. Nothing contained herein constitutes a license to practice under any patent and it should not be construed as an inducement to infringe any patent and the user is advised to take appropriate steps to be sure that any proposed use of the product will not result in patent infringement.



Americas

T +1 610 668 9090 F +1 610 668 8139 americas@purolite.com **EMEA** T +44 1443 229334

F +44 1443 227073 europe@purolite.com Asia Pacific

T +86 571 876 31382 F +86 571 876 31385 asiapacific@purolite.com FSU

T +7 495 363 5056 F +7 495 564 8121 fsu@purolite.com