

PRODUCT DATA SHEET

Purofine® PFC100

Polystyrenic Gel, Strong Acid Cation Resin, Sodium form, Uniform Particle Size

PRINCIPAL APPLICATIONS

- Softening - Industrial
- Demineralization when regenerated with acids

ADVANTAGES

- Efficient regeneration
- High operating capacity
- Efficient separation
- Lower pressure drop versus standard resin
- Good physical and chemical stability

SYSTEMS

- Counterflow regenerated systems
- Coflow regenerated systems

REGULATORY APPROVALS

- IFANCA Halal Certified
- 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:

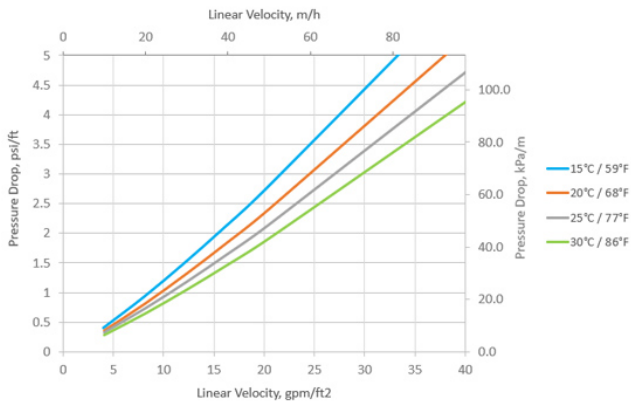
Polymer Structure	Gel polystyrene crosslinked with divinylbenzene
Appearance	Spherical Beads
Functional Group	Sulfonic Acid
Ionic Form	Na ⁺ form
Total Capacity (min.)	2.0 eq/L (43.7 Kgr/ft ³) (Na ⁺ form)
Moisture Retention	44 - 48 % (Na ⁺ form)
Mean Diameter	570 ± 50 µm
Uniformity Coefficient	1.1 - 1.2
Reversible Swelling, Na ⁺ → H ⁺ (max.)	9 %
Specific Gravity	1.29
Shipping Weight (approx.)	795 - 820 g/L (49.7 - 51.2 lb/ft ³)
Temperature Limit	120 °C (248.0 °F)

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.

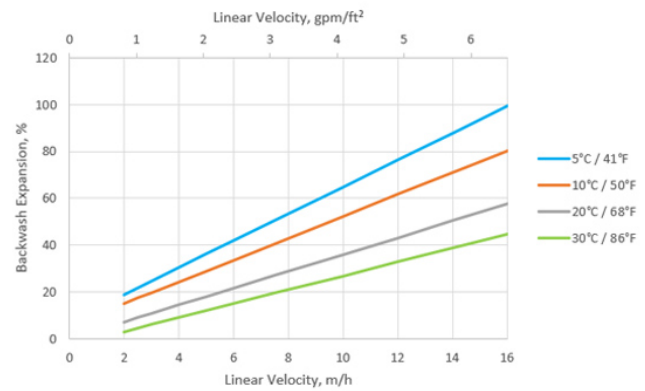
PRESSURE DROP ACROSS RESIN BED



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.

BACKWASH EXPANSION OF RESIN BED





Algeria
Australia
Bahrain
Brazil
Canada
China
Czech Republic
France
Germany

India
Indonesia
Israel
Italy
Japan
Jordan
Kazakhstan
Korea
Malaysia

Mexico
Morocco
New Zealand
Poland
Romania
Russia
Singapore
Slovak Republic
South Africa

Spain
Taiwan
Tunisia
Turkey
UK
Ukraine
USA
Uzbekistan



Americas

Purolite Corporation
2201 Renaissance Blvd.
King of Prussia, PA 19406
T +1 800 343 1500
T +1 610 668 9090
F +1 800 260 1065
americas@purolite.com

EMEA

Purolite Ltd.
Unit D
Llantrisant Business Park
Llantrisant, Wales, UK
CF72 8LF
T +44 1443 229334
F +44 1443 227073
emea@purolite.com

FSU

Purolite Ltd.
Office 6-1
36 Lyusinovskaya Str.
Moscow, Russia
115093
T +7 495 363 5056
F +7 495 564 8121
fsu@purolite.com

Asia Pacific

Purolite China Co. Ltd.
Room 707, C Section
Huanglong Century Plaza
No.3 Hangda Road
Hangzhou, Zhejiang, China 310007
T +86 571 876 31382
F +86 571 876 31385
asiapacific@purolite.com

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.

