PRODUCT DATA SHEET

Purolite™ Purofine™ PFA444

ポリスチレン系 ゲル, I型強塩基性アニオン交換樹脂ゲル, 塩素形, 均一粒径

PRINCIPAL APPLICATIONS

- 脱塩 - 高濃度有機物含有水

ADVANTAGES

- 高交換容量
- 非常に高い物理的安定性
- 高い反応速度

TYPICAL PACKAGING

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

TYPICAL PHYSICAL & CHEMICAL CHARACTERISTICS:

Polymer Structure	ジビニルベンゼンにより架橋されたポリスチレンゲル
Appearance	球形ビード
Functional Group	4 級アンモニウム
Ionic Form	Cl^-
総交換容量 (最小)	1.1 eq/l (24.0 Kgr/ft³) (Cl^-)
水分含有率	50 - 60 % (Cl^-)
平均径	570 ± 50 µm
均一係数 (最大)	1.3
可逆的膨張, $Cl^- \rightarrow OH^-$ (最大)	30 %
比重	1.07
見かけ密度 (概算)	660 - 700 g/L (41.2 - 43.8 lb/ft³)
温度制限	100 °C (212.0 °F) (Cl^-)
温度制限	60 °C (140.0 °F) (OH^- 形)

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油圧特性

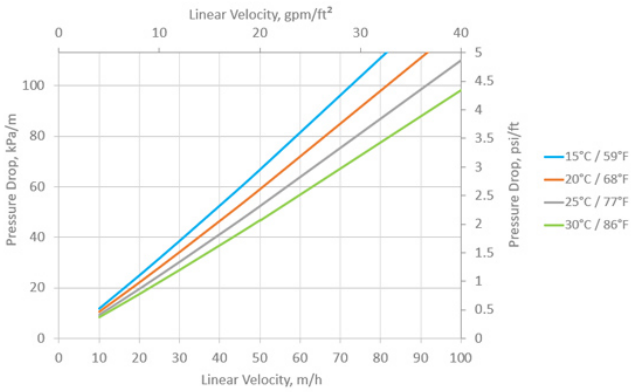
PRESSURE DROP

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.

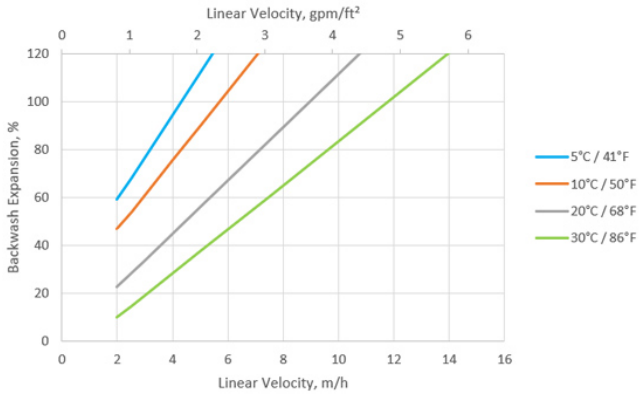
BACKWASH

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



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