



DOWEX™ HCR-S/S N Resin DOWEX™ HCR-S/S N樹脂

For Residential Water 對於居民生活用水

Description 說明

DOWEX™ HCR-S/S N is a gel type strong acid cation exchange resin used for water domestic softening. It has excellent physical, chemical and thermal stability, that can be good ion exchange kinetics and high exchange capacity. DOWEX HCR-S/S N has been specially developed for potable water following a special manufacturing process which does not use any solvents. It is produced in a free flowing form which makes the filling of the units and cartridges very easy and rapid.

DOWEX HCR-S/S N is analysed for compliance with high purity specification, in particular: physical and chemical properties, individual release of certain substance in the treated water, global release of organic substances, and total microbial count.

Typical Physical and Chemical Properties

典型的物理 化工 屬性

Physical form 物理形態	Amber spherical beads 琥珀球形珠
Matrix 矩陣	Styrene divinylbenzene copolymer 苯乙烯二乙烯苯共聚物
Functional groups 官能團	Sulphonates 磺酸鹽
Ionic form as shipped 離子形式為運	Na ⁺
Total volume capacity 總成交量能力	1.95 eq/L (46 kgr/ft ³ as CaCO ₃) 1.95當量/ L, (46 kgr/ft ³ 為碳酸鈣)
Moisture retention capacity 水分保持能力	42-52%
Shipping density 船舶密度	820 g/L (51 lbs/ft ³)
Harmonic mean diameter 諧波的平均直徑	600-800 μm
Fines content 罰款的内容	< 0.300 mm : 2.0% max
Coarse beads 粗珠	> 1.187 mm : 2.0% max
Chemical resistance 耐化學性	Insoluble in dilute solutions of acids or bases and common solvents

不溶於酸或鹼和一般溶劑的稀溶液

DOWEX™ HCR-S/SN凝膠型強酸陽離子交換樹脂對水的使用國內軟化。它具有優異的物理，化學和熱穩定性，可良好的離子交換動力學和高交換容量。DOWEX HCR - S / N有專門開發用於飲用水，這不是一個特殊的製造工藝不使用任何溶劑。它是自由流動的形式，這使得各單位的灌裝生產和墨盒很容易和快速。

DOWEX HCR-S/SN分析符合高純度規格，特別是：物理和化學性質，在治療某些物質的釋放個人水，有機物質的全球發布，並共微生物計數。

水處理

Suggested Operating Conditions

建議
工作
條件

Water Treatment			
Maximum operating temperature 最高工作溫度	120°C/250°F		
Service flow rate 服務流量	5–50* BV/h (62.2 gpm/ft ³)		
Regenerants	NaCl 氯化鈉	HCl 鹽酸	H ₂ SO ₄ 硫酸
Level (g/L) 級別 (G / L)	60–250	50–150	50–240
Level (lbs/ft ³) 電平 (lbs/ft ³)	3.8–15.6	3–9.4	3–15
Concentration (%) 濃度 (%)	10	5–8	0.7–6
Flow rate (BV/h) 流量 (BV/ h)	2–8	2–5	2–20
Flow rate (gpa/ft ³) 流量 (gpa/ft ³)	0.25–1.0	0.25–0.63	0.25–2.5
Minimum contact time 最小接觸時間	30 minutes 30分鐘		
Slow rinse 慢沖洗	2 BV at regeneration flow rate 在再生流速2 BV		
Fast rinse 快速沖洗	2–4 BV at service flow rate 2-4 BV的服務流量		

*1 BV (Bed Volume) = 1 m³ solution per m³ resin or 7.5 gals per ft³ resin

* 1 BV (床體積) = 1立方米的解決方案每立方米樹脂或7.5加侖每立方英尺樹脂

25 liter bags or 1 cubic foot bags

25公升袋或1立方英尺袋

Packaging

包裝

Hydraulic Characteristics

液壓

特性

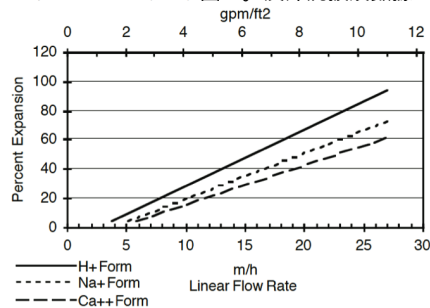
Water Treatment 水處理

Figure 1 shows the bed expansion of DOWEX™ HCR-S/S N, as a function of backwash flow rate and water temperature.

Figure 2 shows the pressure drop data for DOWEX HCR-S/S N, as a function of service flow rate and water temperature.

Figure 1. Backwash Expansion Data

Temperature = 25° C (77° F) 圖 1。反沖洗擴展數據



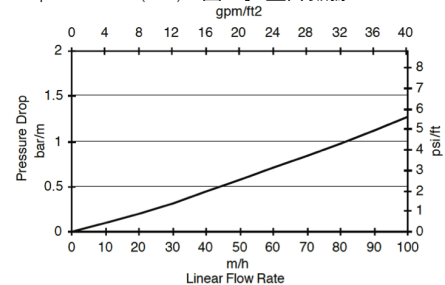
For other temperatures use:

$$F_T = F_{77°F} [1 + 0.008 (T_F - 77)], \text{ where } F = \text{gpm/ft}^2$$

$$F_T = F_{25°C} [1 + 0.008 (1.8T_C - 45)], \text{ where } F = \text{m/h}$$

Figure 2. Pressure Drop Data

Temperature = 20° C (68° F) 圖 2。壓降數據



For other temperatures use:

$$P_T = P_{20°C} / (0.026 T_C + 0.48), \text{ where } P = \text{bar/m}$$

$$P_T = P_{68°F} / (0.014 T_F + 0.05), \text{ where } P = \text{psi/ft}$$

圖 1顯示了DOWEX™HCR-S/SN床的反沖洗功能的擴展，流速和水溫。

圖 2顯示了DOWEX HCR-S/SN壓降數據，作為一個服務功能流速和水溫。

Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

Note

These resins may be subject to drinking water application restrictions in some countries: please check the application status before use and sale.

產品 管家

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陶氏極力鼓勵客戶審查其製造過程，陶氏的產品的應用，從人類健康和環境的角度來看質量，確保陶氏產品的方式，他們不打算使用或測試。陶氏的員工可回答您的問題，並提供合理的技術支持。陶氏的產品資料，包括安全數據表，應諮詢使用前，陶氏的產品。道指當前安全數據表。

注意：

飲水應用程序的限制，在一些國家可能會受到這些樹脂：使用和出售前，請檢查應用程序的狀態。

DOW™ Ion Exchange Resins For more information about DOW™ resins, call the Dow Water & Process Solutions business:

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Warning: Oxidizing agents such as nitric acid attack organic ion exchange resins under certain conditions. This could lead to anything from slight resin degradation to a violent exothermic reaction (explosion). Before using strong oxidizing agents, consult sources knowledgeable in handling such materials.

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