

Safety information

Obtaining SDSs

Safety Data Sheets (SDSs) are available from www.lifetechnologies.com/support.

Note: For the SDSs of chemicals not distributed by Life Technologies, contact the chemical manufacturer.

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July 1 2014



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POROS® GoPure™ 0.5 cmD x 5 cmL Pre-Packed Ion Exchange Chromatography Columns

Pub. no. 4482551 Rev. B

Product information

POROS® GoPure™ 0.5 cmD x 5 cmL Pre-Packed Ion Exchange Chromatography Columns are intended for screening of POROS® Ion Exchange Resins or small scale purification. These pre-packed columns are ready to connect and have the following features:

- Nominal 1 mL bed volume that provides a uniform resin screening platform
- Direct connections to many chromatography systems
- Packed with POROS® 50 Perfusion Chromatography® Resins with unique pore structure and 50um average particle size that provide rapid mass transport for high capacity and resolution over a wide range of flow rates

The resin backbone is cross-linked poly[styrene-divinylbenzene]. A polyhydroxyl surface coating provides low non-specific binding and a coating that can be further functionalized as listed in the following table.

Table 1 POROS® Resin characteristics

POROS® Resin	Chemistry	Surface functionality
HS	Strong cation exchange	Sulphopropyl
XS	Strong cation exchange	Sulphopropyl
HQ	Strong anion exchange	Quaternized polyethyleneimine
PI	Weak anion exchange	Polyethyleneimine
D	Weak anion exchange	Dimethylaminopropyl
XQ	Strong anion exchange	Proprietary quaternary amine

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Specifications

Table 2 Column specifications

Condition	Specification
Dimension	0.5 cmD x 5 cmL
Volume	1 mL (nominal)
Maximum pressure	30 bar <ul style="list-style-type: none"> Higher pressures will be observed while the Ethanol storage solution is removed (1 CV). POROS® XQ: Higher column backpressure may be observed with low-conductivity buffers and solutions (<5 mS/cm).
Recommended flow rate for process development	≥ 3-minute residence time (0.3 mL/min on 5-cmL column, equates to 400 cm/hr on a 20-cmL column)
Column tube and end cells	High density polyethylene (HDPE)
Frits	Polyethylene/polypropylene 14 µm
Connections	Standard HPLC, 10-32 for 1/16-inch tubing
Shipping Solution	20% EtOH, 150 mM NaCl
Asymmetry	0.80 to 1.60
Efficiency:	<ul style="list-style-type: none"> POROS® HS, XS, D POROS® HQ, PI POROS® XQ
	<ul style="list-style-type: none"> ≥ 3600 plates/m ≥ 4000 plates/m ≥ 2500 plates/m

Table 3 Chemical compatibility

Condition	Specification
pH range	1–14
Ionic strength	0–5 M, all common salts
Buffer additives	All common agents, including 1 M sodium hydroxide, 8M urea, 6M guanidine hydrochloride, ethylene glycol, and detergents
Solvents	Water, 0 to 100% alcohol, acetonitrile, 2 M acetic acid, 1 M HCl and other common organic solvents. Note: Do not expose to strong oxidizers (such as hypochlorite), oxidizing acids (such as nitric acid), strong reducing agents (such as sulfite), acetone, or benzyl alcohol.
Temperature	2 to 30°C, do not freeze

Documentation and support

Document	Publication number
<i>POROS® HQ 50 and PI 50 Resins In Bind/elute Chromatography Applications</i>	C024226 0112
<i>POROS® HQ 50 and PI 50 Resins In Flow-through Polish Chromatography Applications</i>	C024146 0112
<i>POROS® XS Strong Cation Exchange Resin Instructions</i>	4445125
<i>POROS® 50 HS Perfusion Chromatography® Bulk Media for Cation Exchange Chromatography Instructions</i>	8-0017-40-0993
<i>POROS® 50 D Perfusion Chromatography® Bulk Media for Anion Exchange Chromatography Instructions</i>	8-0191-40-1297
<i>POROS® 50 HQ, DEAE, and PI Perfusion Chromatography® Bulk Media for Anion Exchange Chromatography Instructions</i>	8-0121-40-0695
<i>POROS® XQ Strong Anion Exchange Resin Instructions</i>	100025569

Life Technologies is dedicated to supporting your use of POROS® chromatography resins. Our Application Scientists are available for support ranging from email and telephone consultation, for process development and resin cleaning optimization, to on-site support for column packing. We also offer a full line of 50 µm bulk POROS® resins for ion-exchange, and affinity chromatography. To speak to a technical specialist about how these resins can improve your current process at bp@lifetech.com.

For more information on POROS products, go to: www.lifetechnologies.com/poros

Ordering

Product	Part number
POROS® GoPure™ HQ 50 Pre-packed column, 0.5 cmD x 5 cmL, 1 mL	4481315
POROS® GoPure™ PI 50 Pre-packed column, 0.5 cmD x 5 cmL, 1 mL	4481318
POROS® GoPure™ D 50 Pre-packed column, 0.5 cmD x 5 cmL, 1 mL	4481319
POROS® GoPure™ HS 50 Pre-packed column, 0.5 cmD x 5 cmL, 1 mL	4481316
POROS® GoPure™ XQ Pre-packed column, 0.5 cmD x 5 cmL, 1 mL	A25812
POROS® GoPure™ XS Pre-packed column, 0.5 cmD x 5 cmL, 1 mL	4481317