

Generik MC-IEX Media

(Ion Exchange Chromatography Media)

Product Description

Generik MC chromatographic resins are composed of polymethacrylate beads with high physical and chemical stability. The Generik MC resins have particle size of 30 and 60 μm with pore size of 800 \AA . The resin can be used as without functional groups for size exclusion separations, or derivatized with different surface chemical groups for alternative modes of chromatography such as ion exchange, hydrophobic interaction or affinity separations.

Generik MC30/60-SCX, SAX, WCX and WAX resins are designed for ion exchange chromatography. On the surface of polymethacrylate beads, ion-exchange functional groups are attached via chemical bonding. Proprietary chemistries were developed to synthesize a densely packed and uniform ion-exchange layer. The resins tolerate high-pressure operation up to 100 bars and provide excellent separations for bio-molecules and other macromolecules.

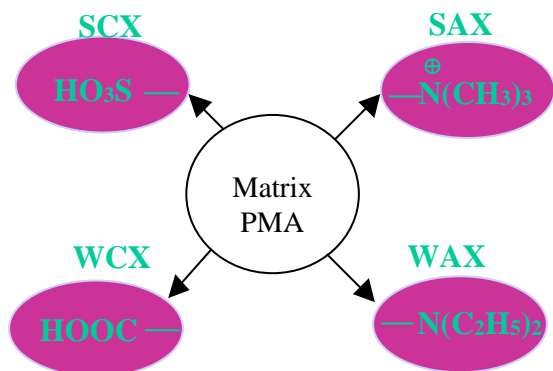


Figure 1. Chemical compositions of Generik MC30/60- SCX, WCX, SAX and WAX resins. Generik MC-SCX resin is a strong cation exchanger with sulfonate functional groups. Generik MC-SAX resin is a strong anion exchanger with quaternary ammonium functional groups. Generik MC-WCX resin is a weak cation exchanger with carboxylic groups. Generik MC-WAX resin is a weak anion exchanger with diethylamine functional groups.

Characteristics

- High chemical stability for low leaching
- Spherical particles with narrow particle size distribution
- High accessible surface area and high loading capacity
- High retentivity and selectivity
- Wide pH applications (pH=2-13)
- High lot to lot consistency
- Available from grams to multi-Kilogram



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- High-pressure limit

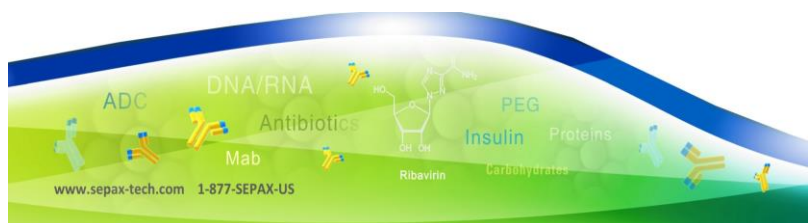
Technical Specifications

Resins Type	Generik MC30-SCX, WCX, SAX, WAX Generik MC60-SCX, WCX, SAX, WAX
Packing	70% (v/v) slurry in 20% ethanol
Matrix	Polymethacrylate
Particle Size	Generik MC30: 20 ~ 45 μm (mean 30 μm) Generik MC60: 45 ~ 90 μm (mean 60 μm)
Pore Structure	800 \AA
Dynamic Binding Capacity*	SCX: 42 mg Lys./mL WCX: 33 mg Lys./mL SAX: 45 mg BSA/mL WAX: 32 mg BSA/mL
pH Stability	2-13
Ionic Capacity	SCX: 0.18-0.22 meq. /mL WCX: 0.14-0.19 meq. /mL SAX: 0.32-0.37 meq. /mL WAX: 0.15-0.21 meq. /mL
Operating Temperature	Up to 40 $^{\circ}\text{C}$
Operating Pressure	Up to 100 bar
Mobile Phase Compatibility	Compatible with aqueous solution, a mixture of water and acetonitrile, acetone, or methanol. Typical buffers: phosphate, Tris, & acetate.
Linear Flow Rate	Up to 1800 cm/hour

*DBC (Dynamic Binding Capacity) measurement method: for Generik MC-SAX and Generik MC-WAX, 5 mg/mL of BSA in 50 mM Tris buffer, pH 8.7, column size 10x150 mm, linear flow rate 212 cm/h, 10% breakthrough. For Generik MC-SCX and Generik MC-WCX, 2 mg/mL of lysozyme in 50 mM phosphate buffer, pH 6.0, column size 10x150 mm, linear flow rate 230 cm/h, 10% breakthrough.

CIP Protocols

- Wash with 2 column volumes of one of the following:
 - 0.5 M NaOH with or without 1.0 M NaCl
 - 0.5 M HCl, with or without 1.0 M NaCl
 - 0.1-1% of Tween or Triton_X-100
 - 70% ethanol or 30% isopropanol
 - 6 M guanidine-HCl or 8 M urea
- Wash immediately with at least 5 column volumes of 0.22 μm filtered binding buffer at pH 6-8.



Customer Service: (877)-SEPAX-US
www.sepax-tech.com

Generik MC Ion-exchange Product Order Information

Description	Particle size	Resin volume	P/N
Generik MC30-SCX	30 µm	100 mL	273030-0010
Generik MC30-SCX	30 µm	1 L	273030-0100
Generik MC30-SCX	30 µm	5 L	273030-0500
Generik MC30-WCX	30 µm	100 mL	274030-0010
Generik MC30-WCX	30 µm	1 L	274030-0100
Generik MC30-WCX	30 µm	5 L	274030-0500
Generik MC30-SAX	30 µm	100 mL	275030-0010
Generik MC30-SAX	30 µm	1 L	275030-0100
Generik MC30-SAX	30 µm	5 L	275030-0500
Generik MC30-WAX	30 µm	100 mL	276030-0010
Generik MC30-WAX	30 µm	1 L	276030-0100
Generik MC30-WAX	30 µm	5 L	276030-0500
Generik MC60-SCX	60 µm	100 mL	273060-0010
Generik MC60-SCX	60 µm	1 L	273060-0100
Generik MC60-SCX	60 µm	5 L	273060-0500
Generik MC60-WCX	60 µm	100 mL	274060-0010
Generik MC60-WCX	60 µm	1 L	274060-0100
Generik MC60-WCX	60 µm	5 L	274060-0500
Generik MC60-SAX	60 µm	100 mL	275060-0010
Generik MC60-SAX	60 µm	1 L	275060-0100
Generik MC60-SAX	60 µm	5 L	275060-0500
Generik MC60-WAX	60 µm	100 mL	276060-0010
Generik MC60-WAX	60 µm	1 L	276060-0100
Generik MC60-WAX	60 µm	5 L	276060-0500

Different package sizes also available



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