



Protecting Your Cation-Exchange Column

The cation-exchange column is designed to be used in accordance with the applicable Pickering methods and mobile phases.

Failure of the column to perform to specifications—degradation in resolution, increasing back-pressure—can result from:

- Accumulation of particulate material on the head of the column.
- Fouling of the resin by irreversibly-bound solutes.

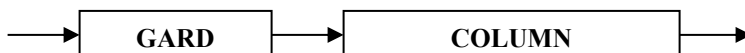
These common failure modes can be prevented by filtering your sample and using a guard column between the injection valve and the column.

Guard columns package includes nuts and ferrules.

PICKERING CATION-EXCHANGE COLUMNS

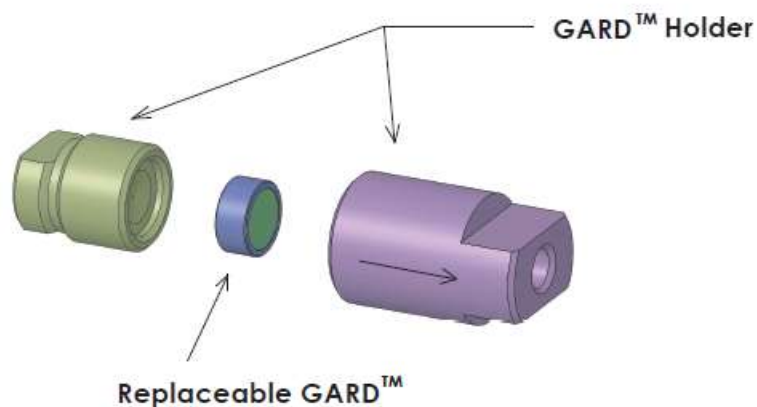
Catalog No.	Description
0354675T	High-efficiency Li ⁺ Column 4.6 x 75 mm
0354100T	High-efficiency Li ⁺ Column 4.0 x 100 mm
0393250	Standard Li ⁺ Column 3.0 x 250 mm
1154150	High-efficiency Na ⁺ Column 4.0 x 150 mm
1154110T	High-efficiency Na ⁺ Column 4.6 x 110 mm
1154150T	High-efficiency Na ⁺ Column 4.0 x 150 mm
1193250	Standard Na ⁺ Column 3.0 x 250 mm
1954150	Glyphosate K ⁺ Form Column 4.0 x 150 mm

IMPORTANT! DO NOT OPEN COLUMN END-FITTINGS FOR ANY REASON; THIS WILL RUIN THE COLUMN AND VOID WARRANTY.



All Pickering cation-exchange columns are used with GARD™ Column Protection System (see page 2)

Cation-exchange GARD™ Column Protection System Specifications and Handling information



Catalog No.	Description
1700-3102	Cation-exchange GARD™ assembly: includes holder and 2 replaceable GARDs™
1700-3101	Replacement cation-exchange GARDs™ (2/pk)
1700-3100	GARD™ holder

Cation-exchange GARD™ Column Protection System is designed to protect your strong cation-exchange analytical columns. It uses a proprietary material to prevent matrix compounds from passing through, but allows the analytes of interest to pass unimpeded. Cation-exchange GARD™ prolongs column life without band spreading or added pressure

Pickering Laboratories cation-exchange columns that can be used with GARD™ Column Protection System include: all Sodium and Lithium columns for amino acids analysis, columns for Glyphosate analysis and ALKION™ exchange column.

INSTALLATION

Place GARD™ into a holder and tighten the holder with a wrench. Do not over tighten. Connect the holder to the line from the injector valve using 10-32 fittings. Flush the GARD™ with Regenerant for 5 min before connecting the analytical column. Though the GARDs™ are reversible, the holder has an arrow to help keep track of flow direction. **Don't reverse the GARD™ once it has been in use; this avoids flushing contaminants into your analytical column.**

ELUANT TYPE

Pickering cation-exchange GARDs™ are compatible with commonly used salt solutions and organic solvents within the pH range 1.5-13. Analytical columns often have restrictions on eluant type, concentration and pH range. Follow manufacture's guidelines on eluants required for use with your analytical column. Do not exceed pressure limits and maximum flow rate specified for analytical column.

Do not use the same GARD™ for different analytical applications.

Should you have any questions about the column performance, please contact Pickering's Technical Support at (800) 654-3330 or e-mail at support@pickeringlabs.com