

# Alltech<sup>®</sup> All-Guard<sup>™</sup> Cartridge System

- Simple - Fewer Parts, Fewer Seals, Fewer Problems
- Fast - Change Cartridges in Seconds Without Tools
- Reliable - Packed Under ISO 9001 Certified Procedures
- Efficient - Matched Media and Low Dead Volume Maintain Chromatographic Performance

## Protection that Won't Compromise Your Separation

The unique All-Guard<sup>™</sup> holder is open on the side for fast installation. Just drop the cartridge in, hand-tighten the holder nut, and connect to your column. The cartridge is always visible, letting you pinpoint problems immediately. All components are type 316 stainless steel for maximum reliability and life, even under demanding, unattended operation.

Connect the All-Guard<sup>™</sup> System directly to your analytical column using the patented Direct-Connect<sup>™</sup> Column Coupler, included with each holder (**Figure 1**). All-Guard<sup>™</sup> holders will also accept standard 10-32 fittings and tubing for those who prefer or require in-line operation (**Figure 2**).

Guard columns act as an extension of the analytical column. If the guard column's selectivity or efficiency doesn't match the analytical column, performance deteriorates. Retention, resolution, and peak symmetry may suffer. The All-Guard<sup>™</sup> System solves these problems by using cartridges filled with packing that matches your analytical column.

The All-Guard<sup>™</sup> holder easily connects to the analytical column.

Figure 1 - Connection via patented Direct-Connect<sup>™</sup> Coupler

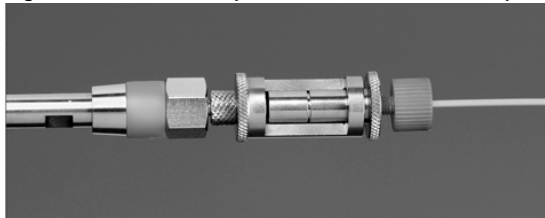
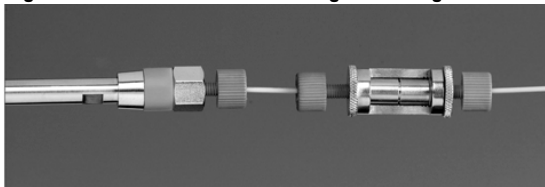


Figure 2 - Connection via a short length of tubing



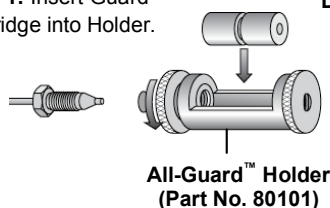
**CAUTION** Users should be aware of the hazards associated with their mobile phase. Always use appropriate personal protective equipment such as safety goggles or glasses, Lab coat and gloves when the column is in operation or when handling mobile phase.



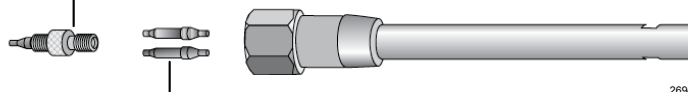
**WARNING** Columns operate at high pressures. To avoid leaks or pressure related failures, please ensure all fittings and connections are tight and secure before operating the column.

## Instructions for Alltech<sup>®</sup> All-Guard<sup>™</sup> Cartridge System

**Step 1:** Insert Guard Cartridge into Holder.



**Direct Connect<sup>™</sup> Column Coupler (Part No. 28195)**



**Waters<sup>®</sup> Tip – Red (Part No. 28004)**  
**Female Tip – Black (Part No. 28002)**

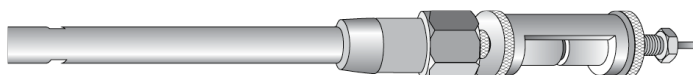
**Step 2:** Hand-Tighten Holder.

Do Not Wrench Tighten!

(This only needs to be tight enough to keep the guard from moving around.)

**Step 3:** Make Connection to Column and Inlet Tubing.

(The connection to the column is most easily made with a column coupler. However both the holder and column assembly will accept any standard 10-32 fitting connection.)



## All-Guard™ Cartridges for Alltech® Small Molecule Columns\*

**Description Qty/Pk Guard Cartridge Part No.**

### 7.5x4.6mm, 5µm

Adsorbosphere™ C18 Guard	3 cartridges	96041
Adsorbosphere™ C8 Guard	3 cartridges	96042
Adsorbosphere™ Phenyl Guard	3 cartridges	96045
Adsorbosphere™ Silica Guard	3 cartridges	96046
Alltima™ C18 Guard	3 cartridges	96080
Alltima™ C8 Guard	3 cartridges	96081
Alltima™ Phenyl Guard	3 cartridges	96082
Alltima™ Silica Guard	3 cartridges	96083
Alltima™ HP C18 Guard	3 cartridges	87684
Alltima™ HP C8 Guard	3 cartridges	87756
Alltima™ HP Silica Guard	3 cartridges	87804
Econosphere™ C18 Guard	3 cartridges	96121
Econosphere™ C8 Guard	3 cartridges	96122
Econosphere™ Silica Guard	3 cartridges	96125
Platinum™ C18 Guard	3 cartridges	32606
Platinum™ C8 Guard	3 cartridges	32612
Platinum™ Silica Guard	3 cartridges	32622
Platinum™ EPS C18 Guard	3 cartridges	32607
Platinum™ EPS C8 Guard	3 cartridges	32614
Prevail™ C18 Guard	3 cartridges	99286
Prevail™ C8 Guard	3 cartridges	99287
Prevail™ Phenyl Guard	3 cartridges	99288
Prevail™ Silica Guard	3 cartridges	99291

Additional chemistries, particle sizes, and cartridge i.d.s are also available for both Alltech® and Vydac® All-Guard™ Cartridges.

\* Guard Holder Required. Part No. 80101 below

## All-Guard™ Cartridges for Vydac® Large Molecule Columns\*

**Description Qty/Pk Guard Kit Part No. Qty/Pk Guard Cartridge Part No.**

### 7.5x4.6mm, 5µm

218MS C18 Guard	1 cartridge, 1 holder	218GK54MS	2 cartridges	218GD54MS
238MS C18 Guard	1 cartridge, 1 holder	238GK54MS	2 cartridges	238GD54MS
208MS C8 Guard	1 cartridge, 1 holder	208GK54MS	2 cartridges	208GD54MS
214MS C4 Guard	1 cartridge, 1 holder	214GK54MS	2 cartridges	214GD54MS
218TP C18 Guard	1 cartridge, 1 holder	218GK54	2 cartridges	218GD54
238TP C18 Guard	1 cartridge, 1 holder	238GK54	2 cartridges	238GD54
208TP C8 Guard	1 cartridge, 1 holder	208GK54	2 cartridges	208GD54
214TP C4 Guard	1 cartridge, 1 holder	214GK54	2 cartridges	214GD54
219TP Diphenyl Guard	1 cartridge, 1 holder	219GK54	2 cartridges	219GD54
201TP C18 Guard	1 cartridge, 1 holder	201GK54T	2 cartridges	201GD54T
EVEREST® C18 Guard	1 cartridge, 1 holder	238GK54EV	2 cartridges	238GD54EV

### 7.5x2.1mm, 5µm

218MS C18 Guard	1 cartridge, 1 holder	218GK52MS	2 cartridges	218GD52MS
238MS C18 Guard	1 cartridge, 1 holder	238GK52MS	2 cartridges	238GD52MS
208MS C8 Guard	1 cartridge, 1 holder	208GK52MS	2 cartridges	208GD52MS
214MS C4 Guard	1 cartridge, 1 holder	214GK52MS	2 cartridges	214GD52MS
218TP C18 Guard	1 cartridge, 1 holder	218GK52	2 cartridges	218GD52
238TP C18 Guard	1 cartridge, 1 holder	238GK52	2 cartridges	238GD52
214TP C4 Guard	1 cartridge, 1 holder	214GK52	2 cartridges	214GD52

\* Guard Holder Required. Part No. 80101 below

## All-Guard™ Holder

**Description Qty. Part No.**

All-Guard™ Holder 1 80101

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