



# RediSep®

CONSUMABLES FOR FLASH AND  
PREPARATIVE CHROMATOGRAPHY



Teledyne ISCO's reliable RediSep preparative chromatography products are designed to consistently produce high purity compounds. You'll enjoy fast, easy purification and scale-up from milligram to hundreds of grams.

### Reliable and Reproducible

RediSep columns are precision-packed for high resolution and reproducibility. They feature a one-piece design with luer end fittings for quick, easy connection to Teledyne ISCO CombiFlash® and other chromatography systems. RediSep sets the standard in flash chromatography columns.

### Versatile

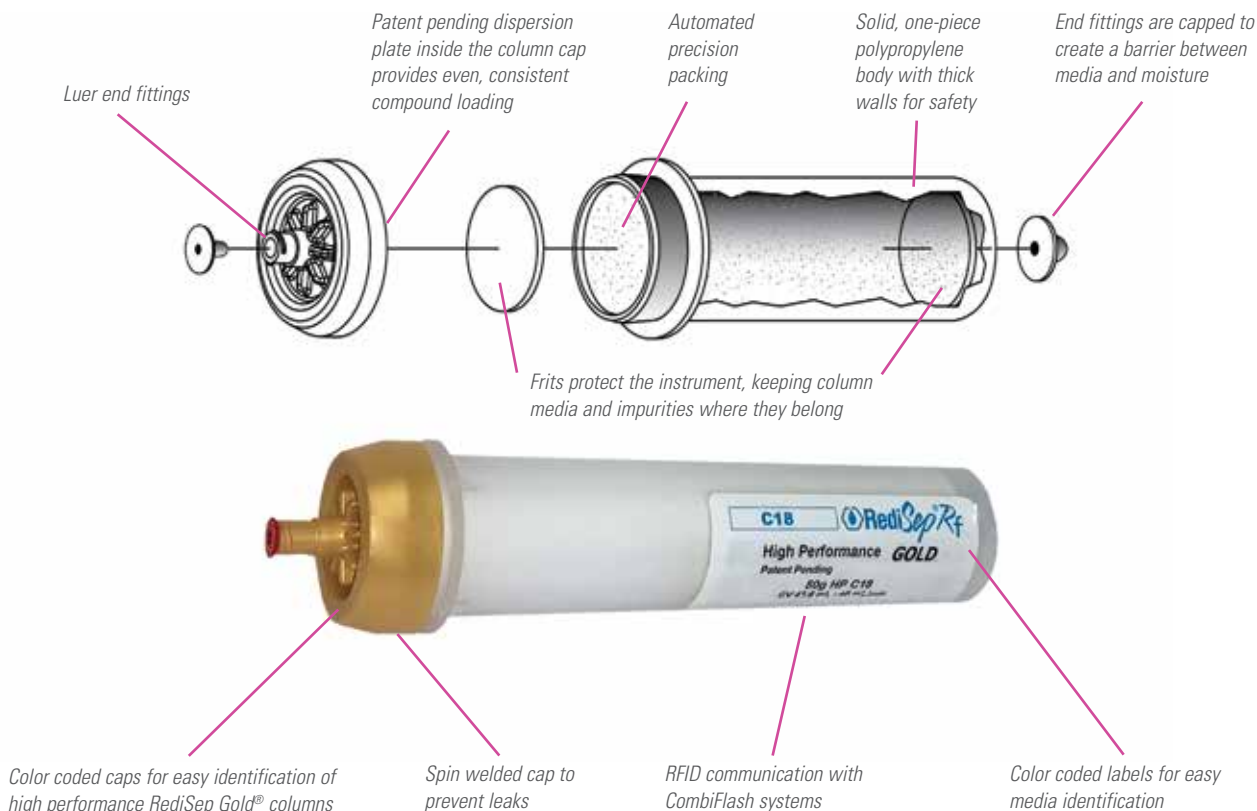
RediSep columns are available in 4 gram up to 3 kg column sizes allowing purification from 10 milligrams up to 300 grams. The enhanced product offering with high performance Gold and a variety of stationary phases expands the utility of RediSep. TLC plates makes method development easy.

### RFID Confidence

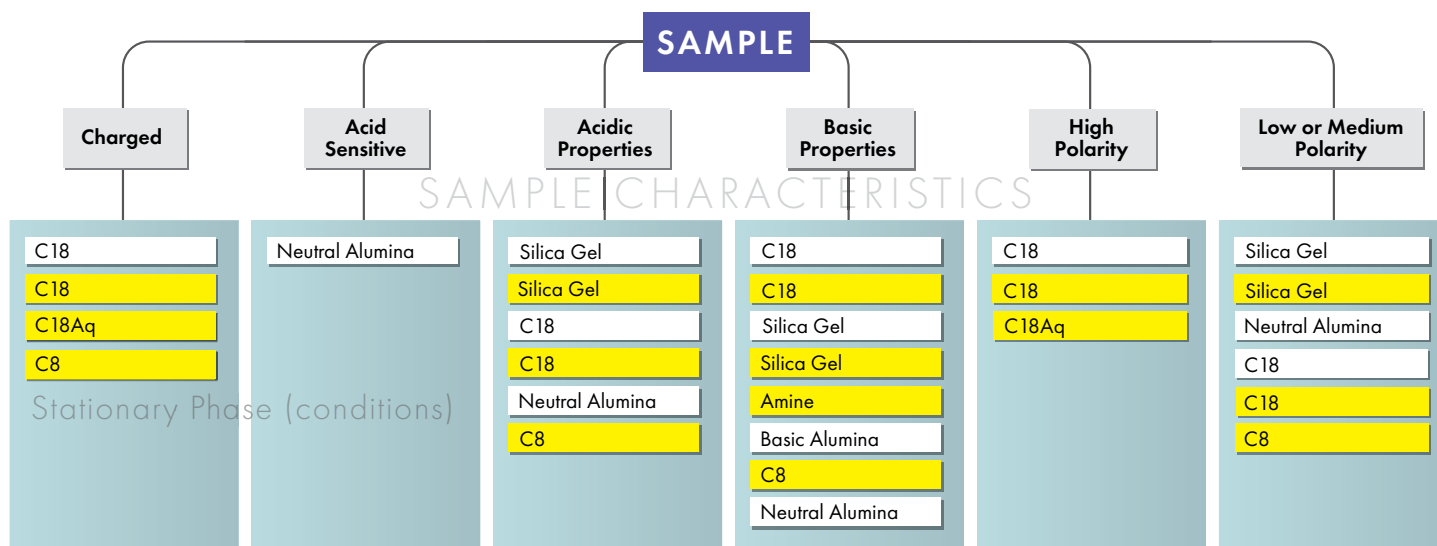
Through RFID technology, the CombiFlash NextGen, EZ Prep, and Torrent® systems automatically detect the column type and size and programs a default method optimized for the RediSep column. Method automation reduces setup time and the potential for errors.

### Safe

Extra thick walls on the RediSep columns and cartridges are pressure rated for safe operation. Machine welded end fittings ensure the column is able to withstand the pressure capability of modern flash systems and not leak valuable compound.



# Column Media Selection Guide



40–60 μm irregular media RediSep columns.  
 20–40 μm spherical media RediSep Gold® high performance columns.

## Stationary Phase Media

Decreasing RediSep Media Polarity

|   |  |
|---|--|
| <b>Normal Phase<br/>Silica, Alumina</b> |  |
| <b>Amine</b>                            |  |
| <b>C8</b>                               |  |
| <b>C18/18Aq</b>                         |  |



## High Performance Flash Chromatography

### Resolution with Speed

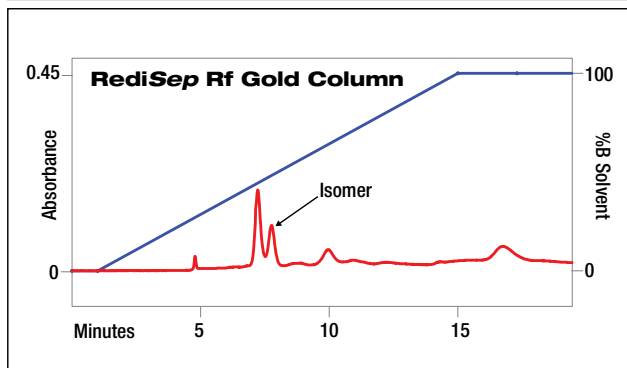
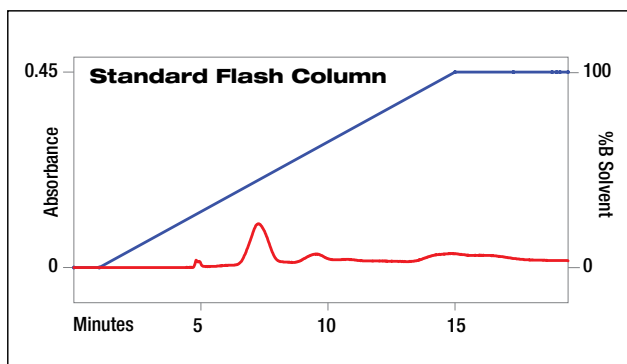
As a pioneer in flash chromatography, Teledyne ISCO continues to bring you the latest innovations to improve your productivity. RediSep Gold high performance flash columns deliver superior sample purity through the use of fine spherical silica gel (20–40  $\mu\text{m}$ ).

RediSep Gold spherical silica provides improved performance without increasing the back pressure. Spherical packing creates the best possible linear beds for even separations. Spherical silica is available bare, and bonded with C18, C18Aq, C8, and amine.

### Gold Resolution— $\Delta R_f \leq 0.1$

Improve your resolution with smaller particles. Patented spherical flash media creates the benefit of tighter packing without an increase in back pressure.

- Provide twice the resolving power of typical disposable flash chromatography columns
- Separate difficult compounds with low  $\Delta R_f$ , such as isomers or trace compounds
- Purify your tough compounds on a single column



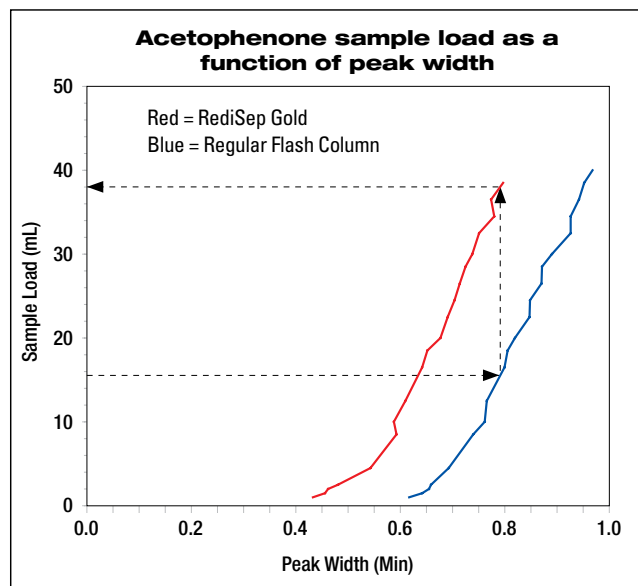
### Run Conditions:

|              |                           |
|--------------|---------------------------|
| Column size: | 40 g                      |
| Load:        | .333 g (on 5 g cartridge) |
| Solvents:    | Hexane & Ethyl Acetate    |
| Flow rate:   | 40 mL/min                 |
| Run time:    | 19.4 min                  |

For complete information, see Application Note AN70 at [teledyneisco.com/en-us/chromatography/application-notes](http://teledyneisco.com/en-us/chromatography/application-notes)

## Gold High Load

Take advantage of the extra resolution to load twice as much compound on the RediSep Gold column. Choose a smaller column size and save time and solvent.



### Run Conditions:

Column size: 12 g RediSep Gold spherical silica column  
12 g competitor's irregular silica column

Loads: 0.02–0.80 g (0.2–7% load)

Solvents: Hexane & Ethyl Acetate

See poster reprint "Spherical Silica Increases Loading Capacity" at [teledyneisco.com/products/lcappnotes.asp](http://teledyneisco.com/products/lcappnotes.asp) for complete information

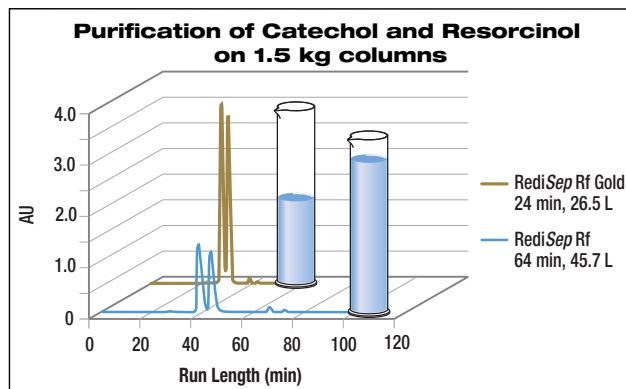
## Solvent Savings by Going Green with Gold

| Column Size | Easy Separation Gold RediSep ( $\Delta CV > 5$ ) 20% Loading | Easy Separation ( $\Delta CV > 1$ ) 10% LOADING |
|-------------|--|---|
| 4 g         | 800 mg   | 400 mg  |
| 12 g        | 2.4 g <b>190 mL</b>  | 1.2 g   |
| 24 g        | 4.8 g <b>270 mL</b>  | 2.4 g   |
| 40 g        | 8.0 g <b>650 mL</b>  | 4.0 g   |
| 80 g        | 16.0 g   | 8.0 g   |
| 120 g       | 24 g <b>1.7 L</b>  | 12 g  |
| 220 g       | 44 g   | 22 g  |
| 330 g       | 66 g   | 33 g  |

## Gold Speed— $\Delta R_f > 0.1$

Take advantage of the sharper peaks provided by spherical media to shorten purification time. Convert your methods to Gold Speed at a click of a button with PeakTrak® software.

- Save up to 60% on time and 25% on solvents
- Separate silica sensitive compounds faster
- Dry compounds faster by collecting two-thirds the fraction volume.



### Run Conditions:

Column size: 40 g

Load: 0.4 g (1% load)

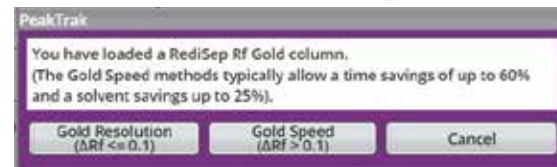
Solvents: Hexane & Ethyl Acetate

Flow rate: 40 mL/min, 80 mL/min

For complete information, see Application Note AN72 at [teledyneisco.com/en-us/chromatography/application-notes](http://teledyneisco.com/en-us/chromatography/application-notes)

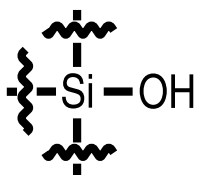
## The RFID Advantage

Simply select between Gold Resolution and Gold Speed methods on CombiFlash systems with RFID.



# RediSep Gold<sup>®</sup> Normal Phase Silica

RediSep Gold high performance flash columns deliver superior sample purity through the use of fine spherical silica gel (20–40 µm). RediSep Gold normal phase silica offers the capability to improve resolution and isolate difficult compounds such as isomers and impurities. Alternatively, the improved resolution can allow for faster run times or higher loads to save time and solvents.



## Specifications:

- Reusability: Single use
- Particle size: 20–40 µm spherical
- Mesh size: 400–632
- Pore size: 60 Å
- Surface area m<sup>2</sup>/g: 500 ±50
- Loading capacity: 0.1–1% Gold Resolution  
1–10% Gold Speed  
2–20% Gold High Load

## RediSep Gold Normal Phase Silica Columns, 20–40 micron

| Sample Load |       | Size   | Qty/Pkg | Flow Rate<br>(mL/min) | Catalog #   |
|-------------|-------|--------|---------|-----------------------|-------------|
| ΔCV≤1       | ΔCV≥6 |        |         |                       |             |
| 20 mg       | 0.8 g | 4 g    | 14      | 18                    | 69-2203-344 |
| 60 mg       | 2.4 g | 12 g   | 14      | 30                    | 69-2203-345 |
| 120 mg      | 4.8 g | 24 g   | 10      | 35                    | 69-2203-346 |
| 200 mg      | 8 g   | 40 g   | 10      | 40                    | 69-2203-347 |
| 400 mg      | 16 g  | 80 g   | 6       | 60                    | 69-2203-348 |
| 600 mg      | 24 g  | 120 g  | 6       | 85                    | 69-2203-349 |
| 1.1 g       | 44 g  | 220 g  | 4       | 150                   | 69-2203-359 |
| 1.65 g      | 66 g  | 330 g  | 3       | 200                   | 69-2203-369 |
| 3.8 g       | 150 g | 750 g  | 3       | 300                   | 69-2203-427 |
| 7.5 g       | 300 g | 1.5 kg | 2       | 600                   | 69-2203-428 |
| 15 g        | 600 g | 3.0 kg | 1       | 950                   | 69-2203-529 |



CombiFlash Torrent<sup>®</sup> scale-up purification system shown paired with a Foxy<sup>®</sup> fraction collector.



## Normal Phase TLC Plates



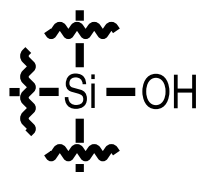
5 x 10 cm, box of 200

#69-2203-400



# RediSep<sup>®</sup> Silver Normal Phase Silica

RediSep Silver disposable flash columns are designed for allpurpose purifications, with high resolution extraction of organic compounds from natural products, and excellent reproducibility in flavors and food chemistry applications.



## Specifications:

- Reusability: Single use
- Particle size: 40–63  $\mu\text{m}$  irregular
- Mesh size: 230–400
- Pore size: 60  $\text{\AA}$
- Surface area  $\text{m}^2/\text{g}$ : 500  $\pm$ 50
- Loading capacity: 0.1–10%

## RediSep Normal Phase Disposable Flash Columns, 40–60 micron

| Sample Load              |                          | Size   | Qty/Pkg | Flow Rate<br>(mL/min) | Catalog #   |
|--------------------------|--------------------------|--------|---------|-----------------------|-------------|
| $\Delta\text{CV} \leq 1$ | $\Delta\text{CV} \geq 6$ |        |         |                       |             |
| 20 mg                    | 0.4 g                    | 4 g    | 20      | 18                    | 69-2203-304 |
| 60 mg                    | 1.2 g                    | 12 g   | 20      | 30                    | 69-2203-312 |
| 120 mg                   | 2.4 g                    | 24 g   | 15      | 35                    | 69-2203-324 |
| 200 mg                   | 4 g                      | 40 g   | 15      | 40                    | 69-2203-340 |
| 400 mg                   | 8 g                      | 80 g   | 12      | 60                    | 69-2203-380 |
| 600 mg                   | 12 g                     | 120 g  | 10      | 85                    | 69-2203-320 |
| Filter                   | 12 g                     | 125 g  | 6       | 200                   | 69-2203-314 |
| 1.1 g                    | 22 g                     | 220 g  | 6       | 150                   | 69-2203-422 |
| 1.65 g                   | 33 g                     | 330 g  | 4       | 200                   | 69-2203-330 |
| 3.8 g                    | 75 g                     | 750 g  | 4       | 300                   | 69-2203-275 |
| 7.5 g                    | 150 g                    | 1.5 kg | 3       | 600                   | 69-2203-277 |
| 15 g                     | 300 g                    | 3.0 kg | 1       | 950                   | 69-2203-527 |



Large Column Adapter accessory supports 750 g, 1.5 kg, and 3.0 kg columns (sizes based on silica capacity).

## Sample Loading— $\Delta R_f$ or $\Delta\text{CV}$ ?

This catalog provides sample loading recommendations in  $\Delta\text{CV}$  (column volumes). Here's how:

- $\Delta R_f$  values are inversely proportional to the elution time of a component from a column as shown by:

$$\text{CV} = 1/R_f$$

- $\Delta\text{CV}$  can be determined using the following formula:

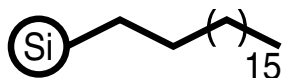
$$\Delta\text{CV} = 1/R_{f1} - 1/R_{f2}$$

- $\Delta\text{CV}$  is a better predictor for cartridge separations

Greater sample loads are possible with easy separations, or those with a  $\Delta\text{CV} \geq 6$ . As the  $\Delta\text{CV}$  approaches  $\leq 1$ , the separation becomes more difficult, necessitating lesser sample loading on the column or choosing a RediSep Gold high resolution column.

# **RediSep Gold<sup>®</sup> C18**

RediSep Gold C18 Reversed-phase columns are packed with 20–40 µm spherical bonded silica, providing improved separation. Achieve near prep-HPLC results with greater sample recovery to easily purify up to gram-scale on your flash system. The end-capped C18 chains allow up to 20 separations at pH 10 without degrading the silica.



## Specifications:

- Reusability: 20 runs (average)
- Particle size: 20–40 µm spherical
- Mesh size: 400–632
- Pore size: 100 Å
- Surface area m<sup>2</sup>/g: 300 ±50
- Carbon content: 15% ±2
- Endcapped: Yes
- Loading capacity: 0.1–2%

## RediSep Gold C18 Columns 20–40 micron

| Sample Load |        | Size   | Qty/Pkg | Flow Rate<br>(mL/min) | Catalog #   |
|-------------|--------|--------|---------|-----------------------|-------------|
| ΔCV≤1       | ΔCV≥6  |        |         |                       |             |
| 5.5 mg      | 110 mg | 5.5 g  | 2       | 18                    | 69-2203-328 |
| 15.5 mg     | 310 mg | 15.5 g | 1       | 30                    | 69-2203-334 |
| 30 mg       | 600 mg | 30 g   | 1       | 35                    | 69-2203-335 |
| 50 mg       | 1.0 g  | 50 g   | 1       | 40                    | 69-2203-336 |
| 100 mg      | 2 g    | 100 g  | 1       | 60                    | 69-2203-337 |
| 150 mg      | 3 g    | 150 g  | 1       | 85                    | 69-2203-338 |
| 275 mg      | 5.5 g  | 275 g  | 1       | 150                   | 69-2203-339 |
| 415 mg      | 8.3 g  | 415 g  | 1       | 200                   | 69-2203-341 |
| 0.95 g      | 19 g   | 950 g  | 1       | 180                   | 69-2203-492 |
| 1.9 g       | 38 g   | 1.9 kg | 1       | 260                   | 69-2203-493 |
| 3.8 g       | 76 g   | 3.8 kg | 1       | 360                   | 69-2203-528 |
| 8.6 kg      | 172 g  | 8.6 kg | 1       | 850                   | 69-2203-900 |



## C18 TLC Plates

Reversed-phase C18 TLC Plates

#69-2203-586

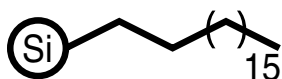


Plates may also be used for RediSep Gold C18 and RediSep Gold C18Aq method development.



# RediSep Gold<sup>®</sup> C18Aq

RediSep Gold C18Aq is specifically designed for highly aqueous conditions. Monofunctionalized C18 bonding is interspersed with hydrophilic ligands to prevent phase collapse in high aqueous conditions. RediSep Gold C18Aq should be used in separations requiring 0–50% organic. These columns offer increased retention through increased polar interactions and the ability to use weaker solvent system. This is useful for highly polar, water soluble compounds such as dyes, glycopeptides, and nucleotides.



## Specifications:

- Reusability: 20 runs (average)
- Particle size: 20–40  $\mu\text{m}$  spherical
- Mesh size: 400–632
- Pore size: 100  $\text{\AA}$
- Surface area  $\text{m}^2/\text{g}$ : 300  $\pm 50$
- Carbon content: 11%  $\pm 2$
- Endcapped: Yes
- Loading capacity: 0.1–2%



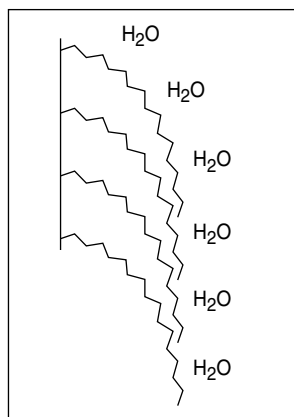
Shown on a CombiFlash NextGen 300+ flash system.

## RediSep Gold C18Aq Columns 20–40 micron

| Sample Load              |                          | Size   | Qty/Pkg | Flow Rate<br>(mL/min) | Catalog #   |
|--------------------------|--------------------------|--------|---------|-----------------------|-------------|
| $\Delta\text{CV} \leq 1$ | $\Delta\text{CV} \geq 6$ |        |         |                       |             |
| 5.5 mg                   | 110 mg                   | 5.5 g  | 2       | 18                    | 69-2203-558 |
| 15.5 mg                  | 310 mg                   | 15.5 g | 1       | 30                    | 69-2203-559 |
| 30 mg                    | 600 mg                   | 30 g   | 1       | 35                    | 69-2203-560 |
| 50 mg                    | 1.0 g                    | 50 g   | 1       | 40                    | 69-2203-561 |
| 100 mg                   | 2 g                      | 100 g  | 1       | 60                    | 69-2203-562 |
| 150 mg                   | 3 g                      | 150 g  | 1       | 85                    | 69-2203-563 |
| 275 mg                   | 5.5 g                    | 275 g  | 1       | 150                   | 69-2203-564 |
| 415 mg                   | 8.3 g                    | 415 g  | 1       | 200                   | 69-2203-565 |
| 1.9 g                    | 38 g                     | 1.9 kg | 1       | 260                   | 69-2203-567 |
| 3.8 g                    | 76 g                     | 3.8 kg | 1       | 360                   | 69-2203-568 |

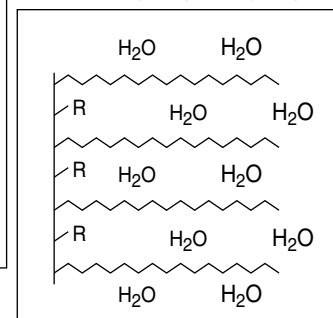
## C18 Silica

Phase Collapse/Dewetting



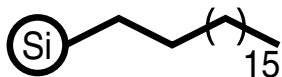
## C18Aq Silica

R= hydrophilic group



# **RediSep<sup>®</sup> Silver C18**

RediSep C18 reversed-phase columns save time and money for the purification of medium to high polarity compounds, as well as ionic compounds. Packed with C18-derivatized silica, RediSep Reversed-phase columns provide reproducible, high-capacity purification without the cost and complexity of prep-HPLC.



## Specifications:

- Reusability: 20 runs (average)
- Particle size: 40–63  $\mu\text{m}$  irregular
- Mesh size: 230–400
- Pore size: 60  $\text{\AA}$
- Surface area  $\text{m}^2/\text{g}$ : 500  $\pm$ 50
- Carbon Content: >17%
- Endcapped: Yes
- Loading capacity: 0.1–2%

## RediSep C18 Columns 40–60 micron

| Sample Load             |                         | Size  | Qty/Pkg | Flow Rate<br>(mL/min) | Catalog #   |
|-------------------------|-------------------------|-------|---------|-----------------------|-------------|
| $\Delta\text{CV}\leq 1$ | $\Delta\text{CV}\geq 6$ |       |         |                       |             |
| 4.3 mg                  | 86 mg                   | 4.3 g | 2       | 18                    | 69-2203-410 |
| 13 mg                   | 260 mg                  | 13 g  | 1       | 30                    | 69-2203-411 |
| 26 mg                   | 520 mg                  | 26 g  | 1       | 35                    | 69-2203-412 |
| 43 mg                   | 860 mg                  | 43 g  | 1       | 40                    | 69-2203-413 |
| 86 mg                   | 1.72 g                  | 86 g  | 1       | 60                    | 69-2203-416 |
| 130 mg                  | 2.6 g                   | 130 g | 1       | 85                    | 69-2203-414 |
| 240 mg                  | 4.8 g                   | 240 g | 1       | 150                   | 69-2203-418 |
| 360 mg                  | 7.2 g                   | 360 g | 1       | 200                   | 69-2203-415 |



Shown on a CombiFlash<sup>®</sup> EZ Prep Hybrid Flash/Prep system.

## Storage Instructions for All C8 and C18 Columns

Proper storage will allow RediSep C18, RediSep Gold C8, RediSep Gold C18, and RediSep Gold C18Aq columns to be reused:

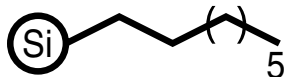
- Never allow the column to dry out after use. Turn off the air purge on instrument.\*
- Remove all organic modifiers by flushing the column with 3 column volumes of 50% methanol or acetonitrile in water.
- Store the column in 70-90% methanol or acetonitrile in water with end caps in place.

\*CombiFlash<sup>®</sup> NextGen, EZ Prep, and Torrent systems will turn off the column air purge as needed by reading the column RFID tag.



# RediSep Gold<sup>®</sup> C8

RediSep Gold C8 reversed-phase columns are packed with 20–40 µm spherical bonded silica, providing improved separation. Achieve near prep-HPLC results with greater sample recovery to easily purify up to gram-scale on your Flash system. Increased pore size optimized for purification of larger molecules like peptides and proteins.



## Specifications:

- Reusability: 20 runs (average)
- Particle size: 20–45 µm spherical
- Mesh size: 320–632
- Pore size: 200 Å
- Surface area m<sup>2</sup>/g: 150 ±50
- Carbon content: 4.5% ±2
- Endcapped: Yes
- Loading capacity: 0.1–2%



## RediSep C8 Columns 20–40 micron

| Sample Load |        | Size   | Qty/Pkg | Flow Rate<br>(mL/min) | Catalog #   |
|-------------|--------|--------|---------|-----------------------|-------------|
| ΔCV≤1       | ΔCV≥6  |        |         |                       |             |
| 15.5 mg     | 310 mg | 15.5 g | 1       | 30                    | 69-2203-710 |
| 30 mg       | 600 mg | 30 g   | 1       | 35                    | 69-2203-711 |
| 50 mg       | 1.0 g  | 50 g   | 1       | 40                    | 69-2203-712 |
| 100 mg      | 2 g    | 100 g  | 1       | 60                    | 69-2203-713 |
| 150 mg      | 3 g    | 150 g  | 1       | 85                    | 69-2203-714 |

## New Alternate Stationary Phase for Peptide and Protein Purification!

Our 200 angstrom C8 media offers larger pore silica for better resolution and peak shape in the purification of peptides and proteins. Larger molecules such as proteins and peptides cannot fully enter smaller pores, limiting the exterior surface area available for molecule to stationary phase interaction.

The C8 modified silica offers an alternative selectivity suited for larger molecules with increasing hydrophobicities, improving both resolution and peak shape.

# **RediSep Gold<sup>®</sup> Amine**

RediSep Gold Amine columns can be used in either normal or reversed-phase conditions for the purification of compounds with basic properties by interacting with the hydrogen bonds. Functionalized amine silica protects the acidic silanol groups to result in sharper peaks and purity.

Useful in the separation of drug intermediates such as those with adenine, pyridine, or aniline groups. Use bonded amine to purify 2°, 3°, and heterocyclic amines without using dichloromethane. Amine media also eliminates the need to add a mobile phase modifier such as TEA, which reduces the time required to remove solvent from purified fractions.

Use caution when purifying aldehydes and ketones which may react with amine side chains to form imines. Test a small amount on a small column.



## Specifications:

- Reusability: 20 runs (average)
- Particle size: 20–40 µm spherical
- Mesh size: 400–632
- Pore size: 100 Å
- Surface area m<sup>2</sup>/g: 300 ±50
- Loading capacity: 0.1–2%

## RediSep Rf Gold Amine Columns 20–40 micron

| Sample Load |        | Size   | Qty/Pkg<br>(mL/min) | Flow Rate | Catalog #   |
|-------------|--------|--------|---------------------|-----------|-------------|
| ΔCV≤1       | ΔCV≥6  |        |                     |           |             |
| 5.5 mg      | 110 mg | 5.5 g  | 2                   | 18        | 69-2203-504 |
| 15.5 mg     | 310 mg | 15.5 g | 1                   | 30        | 69-2203-505 |
| 30 mg       | 600 mg | 30 g   | 1                   | 35        | 69-2203-506 |
| 50 mg       | 1.0 g  | 50 g   | 1                   | 40        | 69-2203-507 |
| 100 mg      | 2 g    | 100 g  | 1                   | 60        | 69-2203-508 |
| 150 mg      | 3 g    | 150 g  | 1                   | 85        | 69-2203-509 |
| 275 mg      | 5.5 g  | 275 g  | 1                   | 150       | 69-2203-510 |

## RediSep Gold Amine TLC Plate

5 x 10 cm, box of 50, with F254 indicator

#69-2203-573



Shown on a CombiFlash NextGen flash system.

## Storage Instructions for Amine Columns

Proper storage will allow Amine columns to be reused:

- Do not allow the column to dry out after first use. Turn off the air purge on instrument.\*
- If run solvents are immiscible with storage solvents, wash the column with an intermediate solvent.
- Remove all organic modifiers or strong organic solvents by flushing the column with 3 column volumes of 80% acetonitrile in water or 100% isopropanol.
- Store the column in flush solvent with end caps in place.

\*CombiFlash<sup>®</sup> NextGen, EZ Prep, and Torrent will turn off the column air purge as needed by reading the column RFID tag.



# RediSep<sup>®</sup> Silver Alumina

Single use alumina columns run under normal phase conditions and offer different selectivity to silica. Neutral alumina columns are useful when samples are acid sensitive and prone to degradation on normal phase silica gel.

Choose basic alumina to purify basic compounds without basic modifiers such as TEA or ammonium hydroxide. This avoids solvent swapping, washing the chromatography system, or contaminating subsequent runs.



## Specifications:

- Reusability: Single use
- Particle size: 40–63  $\mu\text{m}$  irregular
- Mesh size: 230–400
- Pore size: 60  $\text{\AA}$
- Surface area  $\text{m}^2/\text{g}$ : 200  $\pm$  50
- pH: Neutral 7.0  
Basic 9.7  $\pm$  0.3
- Loading capacity: 0.5–4%

## RediSep Alumina Columns–Neutral

| Sample Load             |                         | Size  | Qty/Pkg Rate | Flow (mL/min) | Catalog #   |
|-------------------------|-------------------------|-------|--------------|---------------|-------------|
| $\Delta\text{CV}\leq 1$ | $\Delta\text{CV}\geq 6$ |       |              |               |             |
| 40 mg                   | 320 mg                  | 8 g   | 20           | 18            | 69-2203-440 |
| 120 mg                  | 960 mg                  | 24 g  | 20           | 30            | 69-2203-441 |
| 240 mg                  | 1.92 g                  | 48 g  | 15           | 35            | 69-2203-442 |
| 400 mg                  | 3.2 g                   | 80 g  | 15           | 40            | 69-2203-443 |
| 800 mg                  | 6.4 g                   | 160 g | 12           | 60            | 69-2203-446 |

## RediSep Alumina Columns–Basic

| Sample Load             |                         | Size  | Qty/Pkg Rate | Flow (mL/min) | Catalog #   |
|-------------------------|-------------------------|-------|--------------|---------------|-------------|
| $\Delta\text{CV}\leq 1$ | $\Delta\text{CV}\geq 6$ |       |              |               |             |
| 40 mg                   | 320 mg                  | 8 g   | 20           | 18            | 69-2203-450 |
| 120 mg                  | 960 mg                  | 24 g  | 20           | 30            | 69-2203-451 |
| 240 mg                  | 1.92 g                  | 48 g  | 15           | 35            | 69-2203-452 |
| 400 mg                  | 3.2 g                   | 80 g  | 15           | 40            | 69-2203-453 |
| 800 mg                  | 6.4 g                   | 160 g | 12           | 60            | 69-2203-456 |



## RediSep Alumina TLC Plates

Basic, 5 x 10 cm, box of 30, with F254 indicator



#69-2203-403

# RediSep® Solid Load Cartridges

RediSep solid load cartridges improve the resolution of the compound and eliminate reaction byproducts when compared to liquid injection techniques. Prepare pre-filled solid load cartridges by pipetting the dissolved sample onto the top of the cartridge. Prepare empty solid load cartridges by filling the cartridge with a slurry mixture of the dissolved sample and supporting media. For optimal benefits, remove the solvent by vacuum before placing the cartridge on the purification system.

## Empty Disposable Sample Load Cartridges

| Size  | Qty | Catalog #   |
|-------|-----|-------------|
| 5 g   | 30  | 69-3873-235 |
| 25 g  | 30  | 69-3873-240 |
| 65 g  | 12  | 69-3873-225 |
| 260 g | 6   | 69-3873-201 |
| 750 g | 4   | 69-3873-224 |

## Prepacked Disposable Sample Load Cartridges

| Size  | Normal Phase Silica |             | C18 |             |
|-------|---------------------|-------------|-----|-------------|
|       | Qty                 | Catalog #   | Qty | Catalog #   |
| 2.5 g | 20                  | 69-3873-238 | -   | -           |
| 5 g   | 20                  | 69-3873-236 | 5   | 69-3873-237 |
| 12 g  | 15                  | 69-3873-243 | 4   | 69-3873-248 |
| 25 g  | 15                  | 69-3873-241 | 4   | 69-3873-242 |
| 32 g  | 12                  | 69-3873-310 | -   | -           |
| 65 g  | 4                   | 69-3873-226 | -   | -           |
| 260 g | 4                   | 69-3873-202 | -   | -           |

## Self-pack Flash Column Frits

| Size                          | Catalog #   |
|-------------------------------|-------------|
| Package of 150 frits, 5 gram  | 60-5237-052 |
| Package of 100 frits, 25 gram | 60-5237-053 |
| Package of 75 frits, 65 gram  | 60-5237-054 |

## RediSep Bulk Media

| Media       | Particle           | Container Size | Catalog #   |
|-------------|--------------------|----------------|-------------|
| Gold Silica | 20–40 µm irregular | 90 kg          | 60-2207-419 |

## Adjustable Solid Load Cartridge Cap (SLCC)

| Size  | Catalog #   |
|---|-------------|
| For use with RediSep sample load cartridges.<br>Fits 2.5 and 5 gram sample load cartridges.<br>For use on CombiFlash® systems | 60-5237-047 |
| Fits 12 and 25 gram sample load cartridges.<br>For use on all CombiFlash® and Torrent systems                                 | 60-5237-048 |
| Fits 32 and 65 gram sample load cartridges.<br>For use on all CombiFlash® and Torrent systems                                 | 60-5237-044 |
| Fits 130 and 260 gram sample load cartridges.<br>For use on CombiFlash® Torrent systems                                       | 60-5247-008 |
| Fits 375 and 750 gram sample load cartridges.<br>For use on CombiFlash® Torrent systems                                       | 60-5247-009 |







# RediSep<sup>®</sup> Library

Teledyne ISCO has an extensive library of application notes, posters, and paper reprints. Some of the most requested documents are listed below.

## Silica

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**AN70**, Higher Resolution Results with RediSep Gold<sup>®</sup> Silica Columns

**Poster Reprint**, Purification of Carbohydrates by MPLC

**Poster Reprint**, Spherical Silica Increases Loading Capacity

## C18

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**AN49**, Improvements in RP MPLC as Alternative to Prep HPLC

**AN51**, RediSep C18 Column—Purification of Peptides

**AN55**, RediSep C18 Column—Purification of Low-solubility Polar Heterocycles

**AN58**, Non-Aqueous Reverse Phase with RediSep Gold<sup>®</sup> C18

## Amine

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**AN31**, RediSep Amine Column—Purification of high pKa Organic Compounds Case Study 1

**AN99**, Use of RediSep Gold<sup>®</sup> Amine Columns in the Weak Ion Exchange Mode

**Poster Reprint**, Advanced Topics RediSep Specialty Media

## C18Aq

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**AN76**, RediSep Gold<sup>®</sup> C18Aq for Highly Aqueous Mobile Phases

**AN95**, Desalting Samples with RediSep Gold<sup>®</sup> C18Aq Columns

**AN97**, Removal of Non-volatile Solvents with RediSep Gold<sup>®</sup> C18Aq Columns

## Solid Load Cartridges

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**AN15**, Dry Samples Improve Resolution in Normal Phase Flash Chromatography

## Detection Techniques

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**AN22**, Expanded Compound Wavelength Detection with UV-Vis

**AN80**, Evaporative Light Scattering Detectors

**AN81**, CombiFlash<sup>®</sup> All-wavelength Collection

**AN90**, Why Use ELSD if My Compound Absorbs UV?

**AN93**, Information Rich Flash Chromatography I Mass Directed Fractionation

**AN94**, Information Rich Flash Chromatography II All-Wavelength Collection and Purity Measurement

**AN102**, Mass-directed Purification of Steroids with APCI and Purlon

## Peptides

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**AN01**, Peptide Separations Using Reverse Phase RediSep Columns

**AN103**, Save Time and Money by Purifying Peptides Yourself


**AN106**, Purification of a Peptide ACE Inhibitor Using the ACCQPrep HP125 or HP150

**AN109**, The Effect of Reverse Phase Chain Length on Peptide Purification

## General Information

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**AN20**, Acetone as an Alternative to Ethyl Acetate



Our full library is available online at  
[teledyneisco.com/en-us/chromatography/application-notes](http://teledyneisco.com/en-us/chromatography/application-notes)

# RediSep® Prep HPLC Columns

Maximize your Preparative HPLC performance

When you need the highest purity compound, your first choice should be Teledyne ISCO's RediSep Prep columns. RediSep Prep columns are specifically designed for high performance preparative liquid chromatography (Prep HPLC).

## Maximum purity

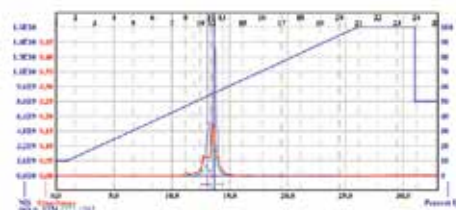
The columns are packed with 5 $\mu$ m particles for maximum purity.

## Easy method development

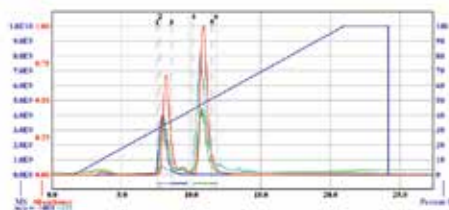
Quickly optimize your method using minimal sample with RediSep Prep HPLC analytical columns.

## Specifications:

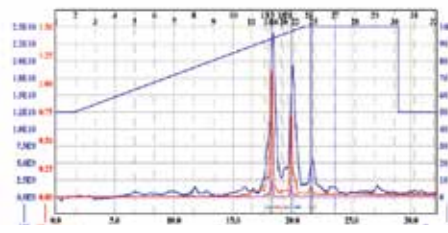
- Particle size: 5  $\mu$ m spherical
- Mesh size: 400–632
- Pore size: 100 Å C18 (200 Å C8)
- Surface area m<sup>2</sup>/g: 300  $\pm$ 50
- Endcapped: Yes (Except silica)
- Carbon: 16.0–18.0% (C18)  
10.0–12.0% (C18Aq)  
4.0–6.0% (C8)
- Loading capacity: 0.1–2%



PEPTIDES



SMALL MOLECULES



NATURAL PRODUCTS

## RediSep Prep HPLC Columns (5 $\mu$ m)

| Size                  | Catalog #   |             |             |             |             |
|-----------------------|-------------|-------------|-------------|-------------|-------------|
| Length/Diameter (ID)  | 4.6 mm      | 10 mm       | 20 mm       | 30 mm       | 50 mm       |
| 150 mm, C18, 100 Å    | 69-2203-800 | 69-2203-808 | 69-2203-810 | 69-2203-812 | 69-2203-814 |
| 150 mm, C18Aq, 100 Å  | 69-2203-801 | 69-2203-816 | 69-2203-818 | 69-2203-820 | 69-2203-822 |
| 150 mm, C8, 200 Å     | 69-2203-856 | 69-2203-857 | 69-2203-858 | 69-2203-860 | 69-2203-862 |
| 150 mm, Silica, 100 Å | 69-2203-802 | 69-2203-824 | 69-2203-826 | 69-2203-828 | -           |
| 250 mm, C18, 100 Å    | -           | 69-2203-809 | 69-2203-811 | 69-2203-813 | 69-2203-815 |
| 250 mm, C18Aq, 100 Å  | -           | -           | -           | -           | 69-2203-823 |
| 250 mm, C8, 200 Å     | -           | -           | 69-2203-859 | 69-2203-861 | 69-2203-863 |
| 250 mm, Silica, 100 Å | -           | -           | 69-2203-827 | 69-2203-829 | 69-2203-831 |

# RediSep<sup>®</sup> Prep Guard Columns

RediSep Prep Guard columns help to maximize the practical lifetime of your Prep column investment. Over time, the performance of a Prep column declines with the accumulation of impurities and particles onto the inlet frit and the head of the column. An inexpensive guard column prevents these impurities and particles from reaching your valuable prep column. Once you begin to see increased backpressure or changes in chromatography (such as peak broadening or changes in retention times), switch out the guard column to see improved performance.

## RediSep Prep Guard Columns (5 $\mu$ )

| Size                      | Catalog #   |
|---------------------------|-------------|
| 30 mm, Guard C18, 100 Å   | 69-2203-804 |
| 30 mm, Guard C18Aq, 100 Å | 69-2203-805 |

RediSep Prep HPLC and Guard columns use stationary phase with matching selectivity to our RediSep Flash Columns

*The ACCQPrep HP150 HPLC system.*



# RediSep<sup>®</sup> Prep UPLC Columns

## Method Development Columns

Matching UPLC column media to our Prep columns allows for method development on analytical UPLC systems and method transfer to our RediSep Prep HPLC columns on Preparative HPLC systems like the ACCQPrep HP150. For more information see our paper: Silver, J. "Overview of Analytical-to-Preparative Liquid Chromatography Method Development." ACS Combinatorial Science, 2019 21 (9), 609-613. DOI: 10.1021/acscmbosci.8b00187

## RediSep Prep UPLC Columns (5 $\mu$ )

| Size                           | Catalog #   |
|--------------------------------|-------------|
| 50 mm, C8, 200 Å, 2.8 $\mu$    | 69-2203-853 |
| 50 mm, C18, 100 Å, 2.8 $\mu$   | 69-2203-854 |
| 50 mm, C18Aq, 100 Å, 2.8 $\mu$ | 69-2203-855 |

# RediSep<sup>®</sup> Column Dimensions



## Column Bed Dimensions

| Size<br>grams | Diameter |        | Length |        |
|---------------|----------|--------|--------|--------|
|               | in.      | cm     | in.    | cm     |
| 4             | 0.495    | 1.257  | 2.418  | 6.412  |
| 12            | 0.768    | 1.950  | 2.947  | 7.485  |
| 24            | 0.89     | 2.260  | 4.26   | 10.820 |
| 40            | 1.065    | 2.705  | 4.99   | 12.675 |
| 80            | 1.25     | 3.175  | 7.844  | 19.923 |
| 120           | 1.456    | 3.698  | 8.6    | 21.844 |
| 125           | 2.421    | 6.149  | 3.25   | 8.255  |
| 220           | 2.064    | 5.243  | 7.43   | 18.872 |
| 330           | 2.427    | 6.165  | 8.627  | 21.913 |
| 750*          | 3.016    | 7.661  | 12.726 | 32.324 |
| 1500*         | 4.04     | 10.262 | 14.292 | 36.302 |
| 3000*         | 5.065    | 12.857 | 16.250 | 14.275 |

\* Inlet and outlet diameters are larger.  
Generally not compatible with  
competitive systems.

## Solid Load Cartridge Bed Dimensions

(Length approximate when filled to stated capacity)

| Size<br>grams | Diameter |        | Length |        |
|---------------|----------|--------|--------|--------|
|               | in.      | cm     | in.    | cm     |
| 5             | 0.613    | 1.557  | 2.01   | 5.105  |
| 25            | 1.046    | 2.657  | 3.35   | 8.509  |
| 65            | 1.25     | 3.175  | 7.25   | 18.415 |
| 270*          | 2.42     | 6.147  | 7.48   | 19.000 |
| 750*          | 4.025    | 10.224 | 6.33   | 16.078 |



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# Get the most out of your columns with these Teledyne ISCO products

## ACCQPrep HP150 Preparative HPLC System

- Flow rates from 1 to 150 mL/min allow development of Prep methods directly on the system without the need for pump head changes
- Operating pressure up to 6000 psi
- Choice of UV or UV-Vis plus ELSD and MS options



## CombiFlash<sup>®</sup> EZ Prep Hybrid Flash/Prep System

- Up to 3500 psi (240 bar) and 200 mL/min
- Run Prep HPLC columns up to 50 mm in diameter (including 5 µm particle diameter)
- Flash purification for 10 mg to 33 g followed by final compound purification on Prep HPLC columns
- UV, UV-Vis, ELSD, and MS detection options available
- Automatically switch between normal and reverse phase solvents

## CombiFlash<sup>®</sup> NextGen Flash Chromatography System

- Driven by intuitive, powerful PeakTrak<sup>®</sup> software
- Smallest footprint of any automated flash system
- Real time and Post Run Spectral Display
- RFID technology for columns and racks
- UV, UV-Vis, ELSD, and MS detection options available



## CombiFlashTorrent<sup>®</sup> Scale-up Flash Purification System

- Purify 0.5 to 300 grams in a single run
- Up to 1 liter/minute at 100 psi
- Versatile sample, solvent, fraction, and waste options
- Fully-grounded solvent path for safety
- Easily scale up methods from CombiFlash or CombiFlash NextGen

## PurIon Mass Spectrometer

- Fractionate on target mass ion(s) or mass range
- Real time and post run spectral data display
- Quickly switch between ESI and APCI ionization probes
- Choose the model that meets your needs
  - PurIon S: 50–1200 Dalton range, auto-switching ionization polarity
  - PurIon L: 50–2000 Dalton range, with auto-switching ionization polarity



## Choosing a Column Size

### Flash Column Load



| Column Size | Easy separation Gold RediSep ( $\Delta CV \geq 6$ ): 20% loading | Easy separation ( $\Delta CV \geq 6$ ): 10% loading | Difficult separation ( $\Delta CV \leq 1$ ): 1% loading |
|-------------|--|---|---|
| 4 g         | 800 mg   | 400 mg  | 40 mg   |
| 12 g        | 2.4 g  | 1.2 g   | 120 mg  |
| 24 g        | 4.8 g  | 2.4 g   | 240 mg  |
| 40 g        | 8.0 g  | 4.0 g   | 400 mg  |
| 80 g        | 16.0 g   | 8.0 g   | 800 mg  |
| 120 g       | 24 g   | 12 g  | 1.2 g   |
| 220 g       | 44 g   | 22 g  | 2.2 g   |
| 330 g       | 66 g   | 33 g  | 3.3 g   |

### RediSep Prep HPLC Columns Loading and Flow Rate Guide



| ID (mm) | Length (mm) | Grams of Media | Loading Range Reverse Phase | Loading Range Normal Phase | Optimum Flow Rate (mL/min) | Approximate Column Volume (mL) |
|---------|-------------|----------------|-----------------------------|----------------------------|----------------------------|--------------------------------|
| 4.6     | 150         | 1.5            | 1.5–15 mg                   | 15–150 mg                  | 1.0                        | 1.6                            |
| 10      | 150         | 7              | 7–70 mg                     | 70–100 mg                  | 4.7                        | 7.7                            |
| 10      | 250         | 12             | 12–120 mg                   | 120 mg–1.2 g               | 4.7                        | 12.8                           |
| 20      | 150         | 28             | 28–280 mg                   | 280 mg–2.8 g               | 18.9                       | 30.6                           |
| 20      | 250         | 47             | 47–470 mg                   | 470 mg–4.7 g               | 18.9                       | 51.1                           |
| 21.2    | 150         | 32             | 32–320 mg                   | 320 mg–3.2 g               | 21.2                       | 34.4                           |
| 21.2    | 250         | 53             | 53–530 mg                   | 530 mg–5.3 g               | 21.2                       | 57.3                           |
| 30      | 150         | 64             | 64–640 mg                   | 640 mg–6.4 g               | 42.5                       | 68.9                           |
| 30      | 250         | 106            | 106–1060 mg                 | 1.1–11 g                   | 42.5                       | 114.9                          |
| 50      | 150         | 177            | 177–1770 mg                 | 1.7–17 g                   | 118.1                      | 191.4                          |
| 50      | 250         | 295            | 295–2950 mg                 | 2.9–29 g                   | 118.1                      | 319.1                          |

The recommended maximum pressure for 10 mm and larger diameter RediSep Prep Columns is 3500 psi (240 bar). The maximum pressure is in line with other manufacturers. Generally recommended pressure limits are not found on the suppliers website but are inside the Column Care and Use Guide.

## Teledyne ISCO

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