

# RediSep<sup>®</sup>R<sub>f</sub>

## Consumables

- Normal Phase Silica
  - Alumina
- Reversed-phase C18
- High Performance
  - Specialty
  - Bulk Silica



Speed  
•  
Productivity  
•  
Reliability



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## ALL NEW!

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- 3 kg Columns
- C18Aq (aqueous) Media
- Bulk Silica
- RediSep Rf Gold High Performance Columns



# RediSep® Rf Column Overview

Teledyne Isco's reliable RediSep Rf 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 Rf 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 Rf sets the standard in flash chromatography columns.

## Versatile

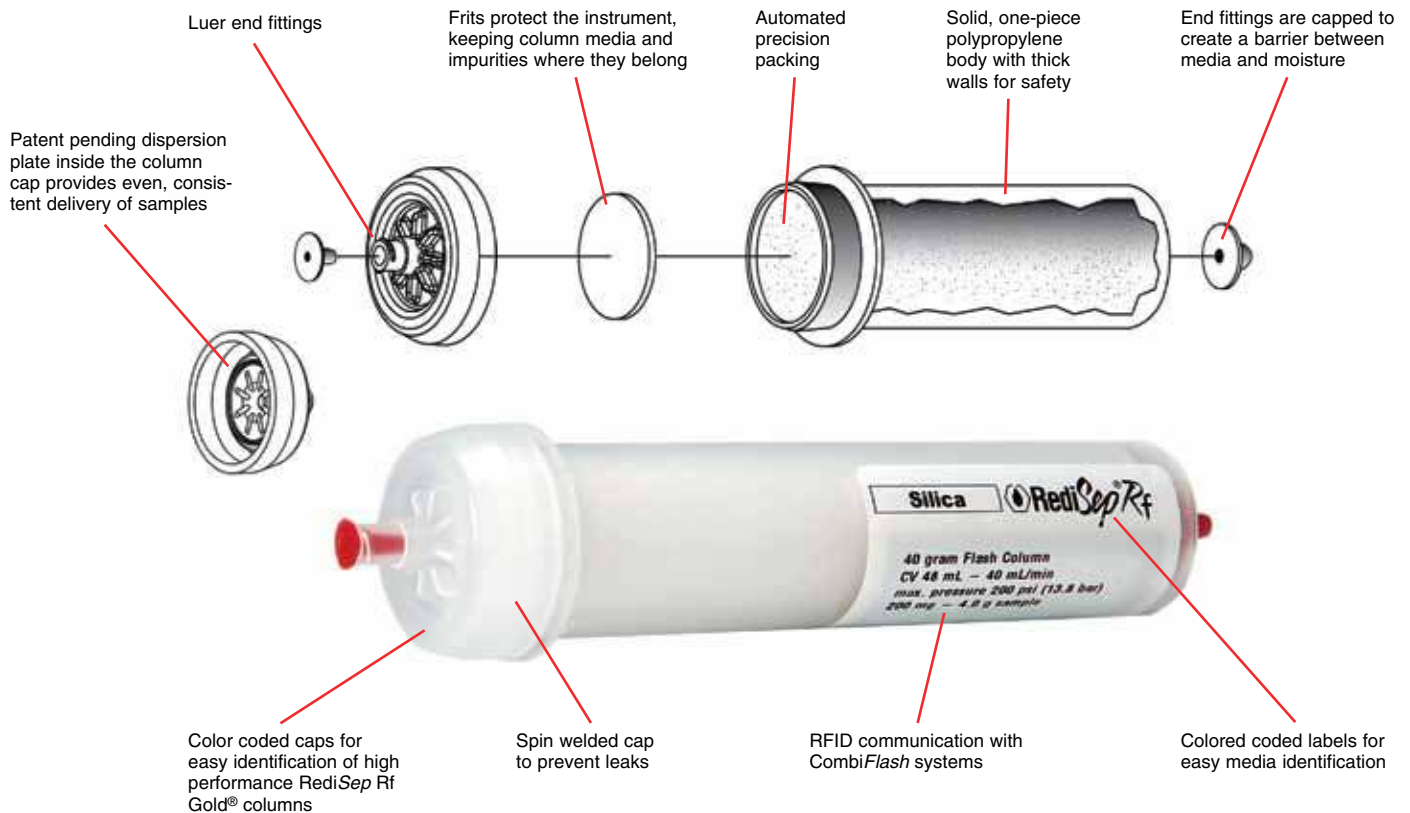
RediSep Rf columns are available in 4 gram up to 3 kg column sizes allowing purification from 10 milligram up to 300 grams. The enhanced product offering with high performance Gold and new stationary phases expands the utility of RediSep Rf. A wide offering of TLC plates makes method development easy.

## RFID Confidence

Through RFID technology, the CombiFlash Rf 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 Rf 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.



# RediSep Rf Gold<sup>®</sup>

## 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 Rf Gold high performance flash columns deliver superior sample purity through the use of fine spherical silica gel (20 – 40  $\mu\text{m}$ ).

RediSep Rf Gold spherical silica provides improved performance without increasing the backpressure. Spherical packing creates the best possible linear beds for even separations. Spherical silica is available bare, and bonded with C18, amine, diol, and cyano.

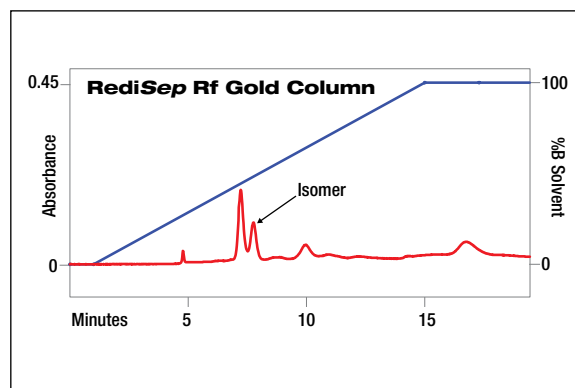
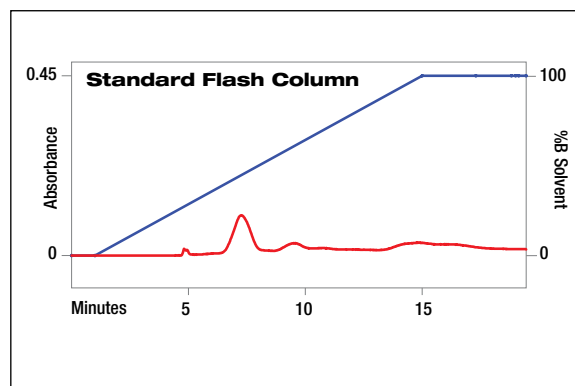


U.S. patents pending.  
European patent 1,316,798 granted.

### 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 backpressure.

- 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:

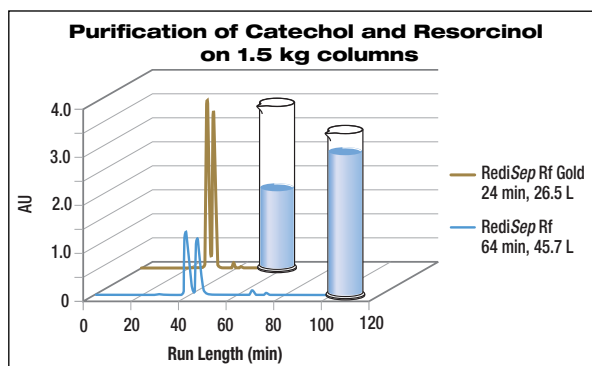
Column size:	40 g
Load:	333 mg (on 5 g cartridge)
Solvents:	Hexane & Ethyl Acetate
Flow rate:	40 mL/min
Run time:	19.4 min

See Application Note AN70 at  
[www.isco.com/products/lcappnotes.asp](http://www.isco.com/products/lcappnotes.asp)  
for complete information.

## Gold Speed – $\Delta Rf > 0.1$

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% time and 30% on solvents
- Separate silica sensitive compounds faster
- Dry compounds faster by collecting in 2/3 fewer fractions



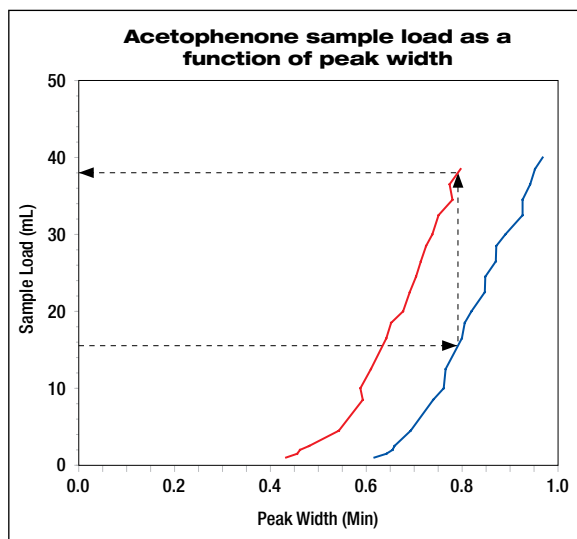
### Run Conditions:

<b>Column size:</b>	40 g
<b>Load:</b>	0.4 g (1% load)
<b>Solvents:</b>	Hexane & Ethyl Acetate
<b>Flow rate:</b>	40 mL/min, 80 mL/min

See Application Note AN72 at [www.isco.com/products/lcappnotes.asp](http://www.isco.com/products/lcappnotes.asp) for complete information.

## Gold High Load

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



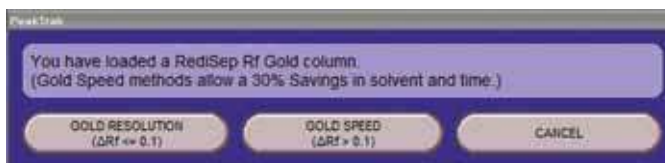
### Run Conditions:

<b>Column size:</b>	12 g spherical RediSep Rf Gold, 12 g irregular non-RediSep
<b>Loads:</b>	0.02 – 0.80 g (0.2 – 7% load)
<b>Solvents:</b>	Hexane & Ethyl Acetate

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



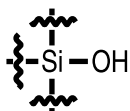
## The RFID Advantage



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

# RediSep® Rf Normal Phase Silica

RediSep Rf disposable, bare silica columns for flash purification of organic compounds are the benchmark for normal phase separations. This high quality media is specified for high resolution and reproducibility for everyday purifications.



## Specifications:

- Reusability: Single use
- Particle size: 40 – 63 µm irregular
- Mesh size: 230 – 400
- Pore size: 60 Å
- Surface area m<sup>2</sup>/g: 500 ±50
- pH: 7 ±1
- Loading capacity: 0.1 – 10%

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

Sample Load		Size	Qty/Pkg	Flow Rate (mL/min)	Catalog #
ΔCV≤1	ΔCV≥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

## Sample Loading — ΔR<sub>f</sub> or ΔCV?

This catalog provides sample loading recommendations in ΔCV (column volumes). Here's how:

- ΔR<sub>f</sub> values are inversely proportional to the elution time of a component from a column as shown by:

$$CV = 1/R_f$$

- ΔCV can be determined using the following formula:

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

- ΔCV is a better predictor for cartridge separations

Greater sample loads are possible with easy separations, or those with a ΔCV ≥6. As the ΔCV approaches ≤1, the separation becomes more difficult, necessitating lesser sample loading on the column or choosing a RediSep Rf Gold high resolution column.



## Normal Phase TLC Plates

5 x 10 cm, box of 200. . . . . 69-2203-400

# RediSep Rf Gold® Normal Phase Silica

RediSep Rf Gold high performance flash columns deliver superior sample purity through the use of fine spherical silica gel (20 – 40 µm). RediSep Rf 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:

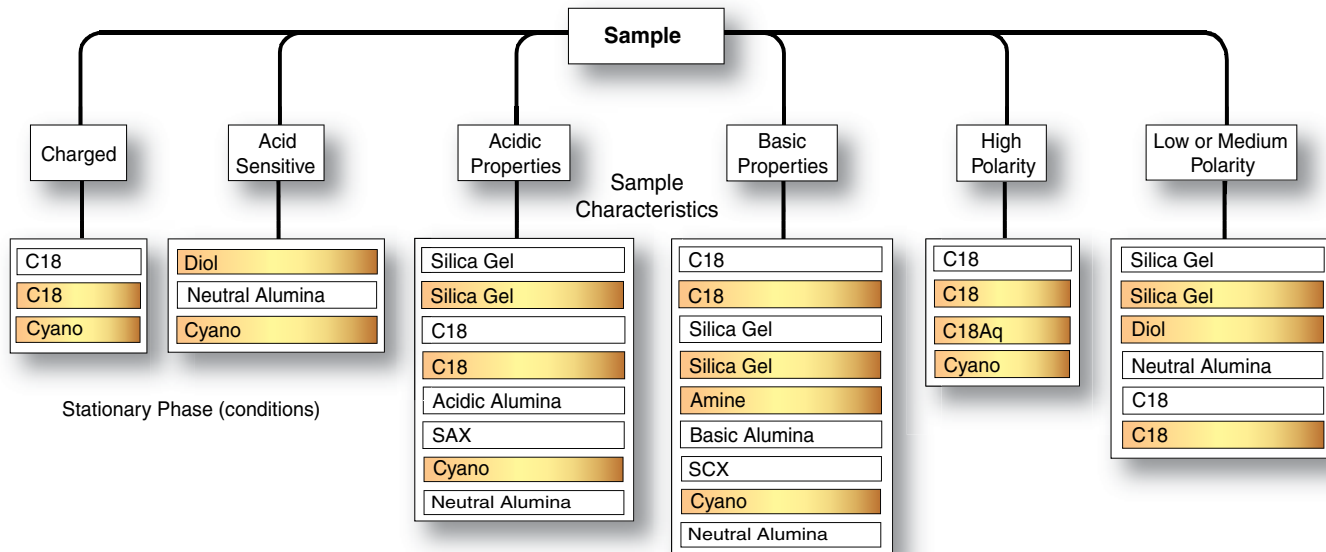
- Reusability: Single use
- Particle size: 20 – 40 µm spherical
- Mesh size: 400 – 632
- Pore size: 60 Å
- Surface area m<sup>2</sup>/g: 500 ±50
- pH: 7 ±1
- Loading capacity: 0.1 – 1% Gold Resolution  
1 – 10% Gold Speed  
2 – 20% Gold High Load

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

Sample Load		Size	Qty/Pkg	Flow Rate (mL/min)	Catalog #
ΔCV≤1	ΔCV≥6				
20 mg	0.4 g	4 g	14	18	69-2203-344
60 mg	1.2 g	12 g	14	30	69-2203-345
120 mg	2.4 g	24 g	10	35	69-2203-346
200 mg	4 g	40 g	10	40	69-2203-347
400 mg	8 g	80 g	6	60	69-2203-348
600 mg	12 g	120 g	6	85	69-2203-349
1.1 g	22 g	220 g	4	150	69-2203-359
1.65 g	33 g	330 g	3	200	69-2203-369
3.8 g	75 g	750 g	3	300	69-2203-427
7.5 g	150 g	1.5 kg	2	600	69-2203-428
15 g	300 g	3.0 kg	1	950	69-2203-529

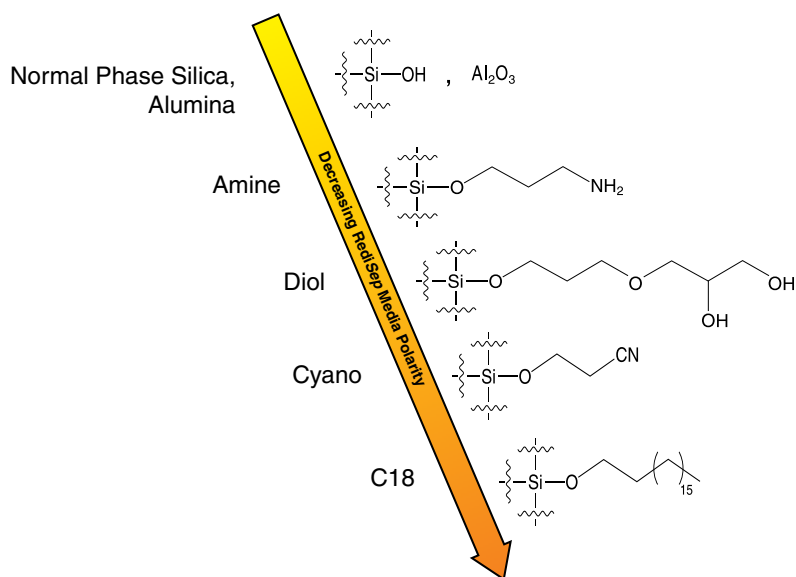


# Column Media Selection Guide



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

## Stationary Phase Polarity

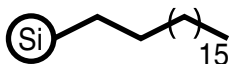


Contact Teledyne Isco for custom adapters to use RediSep Rf columns on non-CombiFlash® systems.



# RediSep® Rf C18

Teledyne Isco RediSep Rf C18 Reversed-phase columns save time and money for the purification of medium to high polarity as well as ionic compounds. Packed with C18-derivatized silica, RediSep Rf 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 µm irregular
- Mesh size: 230 – 400
- Pore size: 60 Å
- Surface area m<sup>2</sup>/g: 500 ±50
- pH: 7 ±1
- Carbon Content: >17%
- Endcapped: Yes
- Loading capacity: 0.1 – 2%

## RediSep Rf C18 Columns 40 – 60 micron

Sample Load		Size	Qty/Pkg	Flow Rate (mL/min)	Catalog #
ΔCV≤1	ΔCV≥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



## C18 TLC Plates

Reversed-phase C18 TLC Plates. . . . . 69-2203-577

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



## Storage Instructions for All C18 Columns

Proper storage will allow RediSep Rf C18, RediSep Rf Gold® C18, and RediSep Rf 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 80% methanol or acetonitrile in water.
- Store the column in flush solvent with end caps in place.

\*CombiFlash® Rf and Torrent systems will turn off the column air purge as needed by reading the column RFID tag.

# RediSep Rf Gold® C18

RediSep Rf 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 destroying 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
- pH: 7 ±1
- Carbon content: 15% ±2
- Endcapped: Yes
- Loading capacity: 0.1 – 2%



## RediSep Rf Gold C18 Columns 20 – 40 micron

Sample Load		Size	Qty/Pkg	Flow Rate (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



# RediSep Rf Gold<sup>®</sup> C18Aq

RediSep Rf Gold C18Aq is especially designed for highly aqueous conditions. Monofunction C18 bonding is interspersed with hydrophilic ligands to prevent phase collapse in high aqueous conditions. RediSep Rf Gold C18Aq should be used in separations requiring 0 – 50% organic. These columns are 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  $\pm 50$
- pH: 7  $\pm 1$
- Carbon content: 11%  $\pm 2$
- Endcapped: Yes
- Loading capacity: 0.1 – 2%

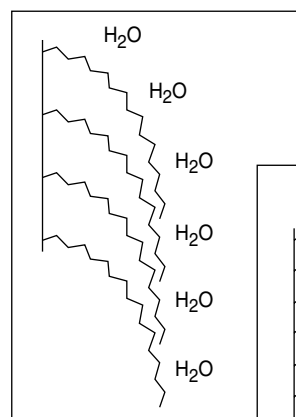
## RediSep Rf Gold C18Aq Columns 20 – 40 micron

Sample Load		Size	Qty/Pkg	Flow Rate (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
0.95 g	19 g	950 g	1	180	69-2203-566
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



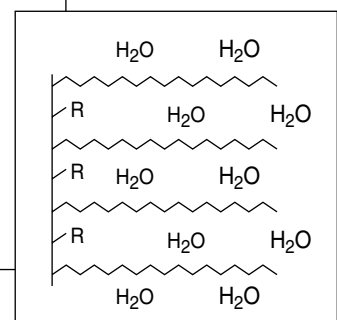
## C18 Silica

Phase Collapse/Dewetting



## C18Aq Silica

R = hydrophilic group



# RediSep Rf Gold<sup>®</sup> Amine

RediSep Rf 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
- pH: 7 ±1
- Loading capacity: 0.1 – 2%

## RediSep Rf Gold Amine Columns 20 – 40 micron

Sample Load		Size	Qty/Pkg	Flow Rate (mL/min)	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
415 mg	8.3 g	415 g	1	200	69-2203-511
0.95 g	19 g	950 g	1	300	69-2203-512
1.9 g	38 g	1.9 kg	1	600	69-2203-513
3.8 g	76 g	3.8 kg	1	950	69-2203-534

## RediSep Gold Amine TLC Plates

5 x 10 cm, box of 50, with F254 indicator . . . 69-2203-573



## Storage Instructions for Amine, Cyano, and Diol Columns

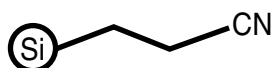
Proper storage will allow amine, cyano, and diol columns to be reused:

- 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:
  - **Amine and Diol columns:** 80% acetonitrile in water or 100% isopropanol.
  - **Cyano columns:** 80% methanol or acetonitrile in water or 100% isopropanol.
- Store the column in flush solvent with end caps in place.

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

## RediSep Rf Gold<sup>®</sup> Cyano

RediSep Rf Cyano columns have a cyano bound silica gel. Cyano functionality creates a slightly hydrophobic nature, and has different selectivity. Cyano may be used in either normal or reversed-phase conditions. Cyano is always the least retentive media in either normal or reversed phase conditions, making it ideal for extremely polar compounds.



### Specifications:

- Reusability: 20 runs (average)
- Particle size: 20 – 40  $\mu\text{m}$  spherical
- Mesh size: 400 – 632
- Pore size: 100 Å
- Surface area  $\text{m}^2/\text{g}$ : 300  $\pm$ 50
- pH: 7  $\pm$ 1
- Loading capacity: 0.1 – 2%

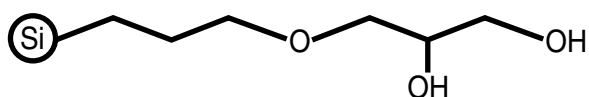
### RediSep Rf Gold Cyano Columns 20 – 40 micron

Sample Load		Size	Qty/Pkg	Flow Rate (mL/min)	Catalog #
$\Delta\text{CV}\leq 1$	$\Delta\text{CV}\geq 6$				
5.5 mg	110 mg	5.5 g	2	18	69-2203-494
15.5 mg	310 mg	15.5 g	1	30	69-2203-495
30 mg	600 mg	30 g	1	35	69-2203-496
50 mg	1.0 g	50 g	1	40	69-2203-497
100 mg	2 g	100 g	1	60	69-2203-498
150 mg	3 g	150 g	1	85	69-2203-499
275 mg	5.5 g	275 g	1	150	69-2203-500
415 mg	8.3 g	415 g	1	200	69-2203-501
0.95 g	19 g	950 g	1	300	69-2203-502
1.9 g	38 g	1.9 kg	1	600	69-2203-503
3.8 g	76 g	3.8 kg	1	950	69-2203-533

## RediSep Rf Gold<sup>®</sup> Diol

RediSep Rf Gold Diol functionalized silica gel behaves similar to bare silica by forming hydrogen bonds and is a good reusable option. Diol is neutral and less polar with greater retention times than bare silica. This media offers an alternative for separations of low to medium polarity compounds.

Care should be taken with ketones, and also 1° and 2° amine compounds or solvents.



### Specifications:

- Reusability: 20 runs (average)
- Particle size: 20 – 40  $\mu\text{m}$  spherical
- Mesh size: 400 – 632
- Pore size: 100 Å
- Surface area  $\text{m}^2/\text{g}$ : 300  $\pm$ 50
- pH: 7  $\pm$ 1
- Loading capacity: 0.1 – 2%

### RediSep Rf Gold Diol Columns, 20-40 micron

Sample Load		Size	Qty/Pkg	Flow Rate (mL/min)	Catalog #
$\Delta\text{CV}\leq 1$	$\Delta\text{CV}\geq 6$				
5.5 mg	110 mg	5.5 g	2	18	69-2203-514
15.5 mg	310 mg	15.5 g	1	30	69-2203-515
30 mg	600 mg	30 g	1	35	69-2203-516
50 mg	1.0 g	50 g	1	40	69-2203-517
100 mg	2 g	100 g	1	60	69-2203-518
150 mg	3 g	150 g	1	85	69-2203-519
275 mg	5.5 g	275 g	1	150	69-2203-520
415 mg	8.3 g	415 g	1	200	69-2203-521
0.95 g	19 g	950 g	1	300	69-2203-522
1.9 g	38 g	1.9 kg	1	600	69-2203-523
3.8 g	76 g	3.8 kg	1	950	69-2203-535

### RediSep Gold Diol TLC Plates

5 x 10 cm, box of 50, with F254 indicator . . . 69-2203-574



# RediSep® Rf 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.

Use acidic alumina to purify acidic compounds without adding modifiers such as acetic acid. 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: Acidic 4.5  $\pm$ 0.4  
Neutral 7.0  
Basic 9.7  $\pm$ 0.3
- Loading capacity: 0.5 – 4%



## RediSep Rf Alumina Columns

Sample Load		Size	Qty/Pkg	Flow Rate (mL/min)	Acidic Cat. # 69-2203-	Neutral Cat. # 69-2203-	Basic Cat. # 69-2203-
$\Delta\text{CV}\leq 1$	$\Delta\text{CV}\geq 6$						
40 mg	320 mg	8 g	20	18	430	440	450
120 mg	960 mg	24 g	20	30	431	441	451
240 mg	1.92 g	48 g	15	35	432	442	452
400 mg	3.2 g	80 g	15	40	433	443	453
800 mg	6.4 g	160 g	12	60	436	446	456
1.2 g	9.6 g	240 g	10	85	434	444	454
2.2 g	17.6 g	440 g	6	150	438	448	458
3.3 g	26.4 g	660 g	4	200	435	445	455

## RediSep Rf Alumina TLC Plates

Neutral, 5 x 10 cm, box of 30, with F254 indicator. . . 69-2203-569  
Basic, 5 x 10 cm, box of 30, with F254 indicator . . . 69-2203-403



## RediSep® Rf SAX

Strong anion exchange (SAX) silica gel fully retains acidic compounds. SAX columns can be used as a clean-up tool or to isolate acidic products. They work as a catch and release process.

### RediSep Rf SAX Columns

Sample Load†	Size	Qty/Pkg	Flow Rate (mL/min)	Catalog #
≤6.27 mmol	5.7 g	2	18	69-2203-381
≤18.7 mmol	17 g	1	30	69-2203-382
≤37.4 mmol	34 g	1	35	69-2203-383
≤62.7 mmol	57 g	1	40	69-2203-384
≤125.4 mmol	114 g	1	60	69-2203-387
≤187 mmol	170 g	1	85	69-2203-385
≤344.3 mmol	313 g	1	150	69-2203-389
≤517 mmol	470 g	1	200	69-2203-386

†Sample load = mmol x compound molecular weight/1000.

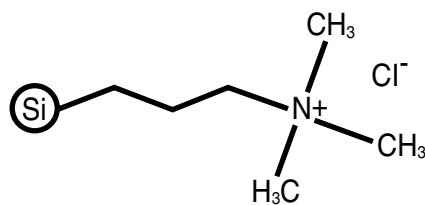
## RediSep® Rf SCX

Strong cation exchange (SCX) silica gel fully retains basic compounds. SCX columns can be used as a clean-up tool or to isolate basic products. They work as a catch and release process.

### RediSep Rf SCX Columns

Sample Load†	Size	Qty/Pkg	Flow Rate (mL/min)	Catalog #
≤3.5 mmol	5 g	2	18	69-2203-390
≤10.5 mmol	15 g	1	30	69-2203-391
≤21 mmol	30 g	1	35	69-2203-392
≤35 mmol	50 g	1	40	69-2203-393
≤70 mmol	100 g	1	60	69-2203-396
≤105 mmol	150 g	1	85	69-2203-394
≤192 mmol	275 g	1	150	69-2203-398
≤287 mmol	410 g	1	200	69-2203-395

†Sample load = mmol x compound molecular weight/1000.



### Specifications:

- Reusability: 20 runs (average)
- Particle size: 40 – 63 µm spherical
- Mesh size: 230 – 400
- Pore size: 100 Å
- Surface area m<sup>2</sup>/g: 300 ±50
- pH: 7 ±1
- Loading capacity: 0.8 ±0.2 mmol/g

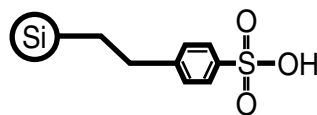
### Storage Instructions for SAX & SCX Columns

Proper storage will allow SAX & SCX columns to be reused:

- Never allow the column to dry out after first use. Turn off the air purge on instrument.\*
- Regenerate the column with:
  - **SAX Column:** 10 column volumes of 5% NH<sub>4</sub>OH in methanol.
  - **SCX Column:** 10 column volumes of 1M acetic acid in methanol.
- Flush with 10 column volumes of 80% methanol in water or 100% isopropanol.
- Store the column in flush solvent with end caps in place.

Depending on your sample, the column activity may decrease during use.

\*CombiFlash® Rf and Torrent systems will turn off the column air purge as needed by reading the column RFID tag.



### Specifications:

- Reusability: 20 runs (average)
- Particle size: 40 – 63 µm spherical
- Mesh size: 230 – 400
- Pore size: 100 Å
- Surface area m<sup>2</sup>/g: 300 ±50
- pH: 7 ±1
- Loading capacity: 0.8 ±0.2 mmol/g

# 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.

## Adjustable Solid Load Cartridge Cap (SLCC)

- For use with RediSep sample load cartridges.
- Fits 2.5 and 5 gram sample load cartridges.  
For use on CombiFlash® Rf systems . . . . . 60-5237-047
- Fits 12 and 25 gram sample load cartridges.  
For use on CombiFlash Rf  
and Torrent™ systems . . . . . 60-5237-048
- Fits 32 and 65 gram sample load cartridges.  
For use on CombiFlash Rf  
and Torrent systems. . . . . 60-5237-044
- Fits 130 and 260 gram sample load cartridges.  
For use on CombiFlash Torrent systems . . . . . 60-5247-008
- Fits 375 and 750 gram sample load cartridges.  
For use on CombiFlash Torrent systems . . . . . 60-5247-009

## 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		Celite		C18	
	Qty	Cat. # 69-3873-	Qty	Cat. # 69-3873-	Qty	Cat. # 69-3873-
2.5 g	20	238	20	312	5	247
5 g	20	236	20	313	5	237
12 g	15	243	15	314	4	248
25 g	15	241	15	315	4	242
32 g	12	310	12	318	3	249
65 g	12	226	12	319	3	250
125 g	4	311				
260 g	4	202				
375 g	4	229				
750 g	4	231				



## Cartridge Dryer

- Solid Load Cartridge Dryer  
Includes adapters for Rf cartridges . . . . . 60-2200-010



## Bulk RediSep® Media

Media	Particle	Container Size	Catalog Number
Silica	63 – 200 µm irregular	450 g	60-3874-091
		950 g	60-3874-045
		25 kg	60-3874-047
Silica	40 – 63 µm irregular	950 g	60-5394-478
		25 kg	60-5394-479
Gold Silica	20 – 40 µm spherical	950 g	60-5394-480
		25 kg	60-3874-055
C18	40 – 63 µm irregular	450 g	60-5394-499
		950 g	60-5394-482
		25 kg	60-3874-059
Gold C18	20 – 40 µm spherical	450 g	60-5394-498
		950 g	60-5394-481
		25 kg	60-5394-493
Gold C18Aq	20 – 40 µm spherical	450 g	60-5394-507
		950 g	60-5394-508
		25 kg	60-5394-509
Gold Amine	20 – 40 µm spherical	450 g	60-5394-500
		950 g	60-5394-491
		25 kg	60-5394-486
Gold Diol	20 – 40 µm spherical	450 g	60-5394-502
		950 g	60-5394-494
		25 kg	60-5394-495
Gold Cyano	20 – 40 µm spherical	450 g	60-5394-501
		950 g	60-5394-496
		25 kg	60-5394-497
Alumina Acidic	40 – 63 µm irregular	950 g	60-5394-489
Alumina Neutral	40 – 63 µm irregular	950 g	60-5394-488
Alumina Basic	40 – 63 µm irregular	950 g	60-5394-487
SCX	40 – 63 µm spherical	450 g	60-5394-504
SAX	40 – 63 µm spherical	450 g	60-5394-503



## Self-pack Flash Column Kits

Self-pack column kits allow use of the reusable RediSep Rf cartridges in place of a column. Each kit includes a solid load cartridge cap, one package of empty cartridges with frits, and bulk silica gel, 40 – 60 µm.

- 1 – 5 gram kit  
with 950 grams bulk silica gel . . . . . 60-3877-206
- 5 – 25 gram kit  
with 1900 grams bulk silica gel . . . . . 60-3877-207\*
- 25 – 65 gram kit  
with 1900 grams bulk silica gel . . . . . 60-3877-208
- 65 – 260 gram kit  
with 2850 grams bulk silica gel . . . . . 60-3877-209

\*To use with CombiFlash Companion systems, purchase external column adaptor, 60-5394-432, extra.

## Self-pack Flash Column Kit Accessories

- 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
- Package of 25 frits, 260 gram . . . . . 60-5237-055



# RediSep® Library

Teledyne has an extensive library of application notes, posters, and paper reprints. Selected resources are listed below.

## Silica ●

**AN70**, Higher Resolution Results with RediSep Rf Gold® Silica Columns

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

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

## C18 ●

**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

## Amine ●

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

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

## Cyano ●

**AN60**, RediSep Neutral Alumina Column – Purification of High pKa Organic Compounds Case Study 1

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

## Diol ●

**AN27**, Rapid Purification of Tocopherols

**Poster Reprint**, Diol Columns – Pretend They're Normal Phase

## SAX ●

**AN44**, RediSep SAX Column – Purification of acidic compounds with multipurpose scavenger column Case Study 1

## SCX ●

**AN39**, RediSep SCX Column – Purification of High pKa Organic Compounds Case Study 1

## Solid Load Cartridges ●

**AN15**, Dry samples improve resolution in normal phase flash chromatography

## Detection Techniques

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

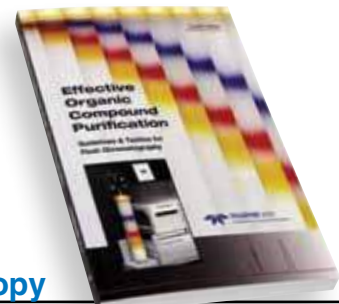
**AN80**, Evaporative Light Scattering Detectors

**AN81**, CombiFlash® All-wavelength Collection

## General Information

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

Our full library is available online at [www.isco.com/lcappnotes](http://www.isco.com/lcappnotes)



## Request your free copy

“Effective Organic Compound Purification — Guidelines and Tactics for Flash Chromatography.”

Visit [www.isco.com/flashguide](http://www.isco.com/flashguide)

# Rely on CombiFlash®

## CombiFlash® Rf 200 and Rf 75

- Powered by easy-to-use PeakTrak® software
- Space saving design
- Large touch screen
- RFID technology
- Rf 200 has UV, UV-vis, All-wavelength, ELSD, and external detection options



## CombiFlash® Rf 4x

- Walk-away automation of four sequential purifications
- Prepare new runs without interrupting the run in progress
- Swap racks for unlimited fraction capacity
- Only needs 8.5 inches (22 cm) of bench space
- Accepts liquid, solid, and on-column samples



## CombiFlash Torrent™

- 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 Rf systems



## 340CF Evaporative Light Scattering Detector (ELSD)

- Modular ELSD solution for CombiFlash systems
- Detect compounds lacking chromophores
- Integral flow splitter minimizes sample loss
- Designed for preparative chromatography
- Long-life, low-maintenance laser

# How to Order

Within the USA, RediSep® Rf and CombiFlash® products are sold direct from the factory to the customer, with support from local representatives in many areas. To arrange for a consultation, product demonstration, or other service from your sales representative, just call our toll-free number below.

**Phone:** (800) 228-4373 (toll-free) }  
(402) 464-0231 } Monday-Friday, 7:30 AM – 5:00 PM Central Time

**Outside the USA and Canada,  
contact your Teledyne Isco  
dealer or call + 1 402 464 0231**

**Fax:** (402) 465-3022

**E-mail:** [iscoOrders@teledyne.com](mailto:iscoOrders@teledyne.com)

Teledyne Isco, Inc. reserves the right to change specifications without notice.



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