

FLASH Chromatography System

# REVELERI



## Reveleris® HP Flash Cartridges

Today, most traditional flash chromatography cartridges are packed with a 50µm, 60Å silica media. Grace® Reveleris® flash cartridges were developed with an improved 40µm, 60Å silica media specially optimized for flash. With further advances in flash chromatography instrumentation and the demands for better resolution of increasingly complex samples. Grace has combined our silica manufacturing expertise and flash innovation to develop the new high performance Reveleris® HP Flash Cartridges. The Reveleris® HP high performance flash cartridges contain a 20µm 60Å silica media for increased resolution with excellent loading capacity to meet the demands for better resolution on complex samples.

#### Benefits of the Reveleris® HP Flash Cartridges:

- Silica specifically developed for flash chromatography
- 20µm low fines particle size for increased resolution and low back pressure
- Ability to be used at optimum flow rates for maximum efficiency and resolution
- Ability to use higher flow rates to help minimize purification time and solvent usage

**Gradient Table** 

Solvent

AB

ΑB

AB

AB

% 2nd

O

100

100

100

Auto-recognition on Grace<sup>®</sup> Reveleris<sup>®</sup> flash chromatography systems

Min

0.0

20

1

2 8.0

3 2.0

## Comparison of Neem Oil 500mg Using a Standard Flash Cartridge and a Reveleris® HP Flash Cartridge

## **Flash Conditions** Cartridge: Standard 40g Silica Flow Rate: 30mL/min Equilibration: 4.0 min Run Length: 12 0 min

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Injection Type: Liquid					
UV2 Wavelength: 254 nm					
UV3 Wavelength: 280 nm					
Solvent A: Petroleum Ether					
Solvent B: Ethyl Acetate					

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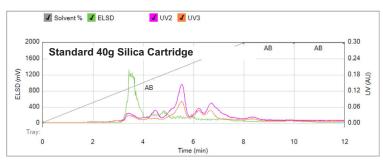
### **Flash Conditions**

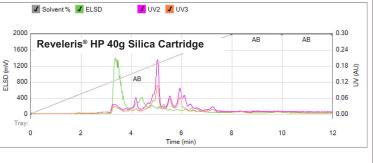
Cartridge: Reveleris® HP 40a Silica

Flow Rate: 30mL/min Equilibration: 4.0 min Run Length: 15.5 min Injection Type: Liquid UV2 Wavelength: 254 nm UV3 Wavelength: 280 nm Solvent A: Petroleum Ether

Solvent B: Ethyl Acetate

Gradient Table						
	Min	Solvent	% 2nd			
1	0.0	AB	0			
2	8.0	AB	100			
3	2.0	AB	100			
4	2.0	AB	100			
5	3.0	AB	100			
6	0.5	AB	100			





It can easily be seen in the purification chromatograms above that the Reveleris® HP flash cartridge offers greater resolution of components in the Neem Oil (a vegetable oil traditionally used in cosmetics and purified for used in pharmaceuticals and other uses). The means a greater fraction purity can be obtained, which minimizes the need for further purification or analysis.

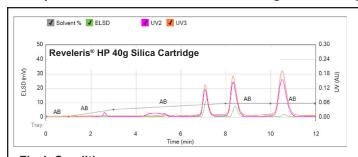


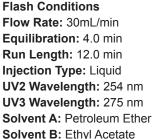
Reveleris® HP Flash Cartridges help chemists to overcome separation challenges with complex samples, while achieving these valuable benefits:

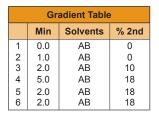
- Improved retention and resolution of a wide range of compounds
- Increased durability to withstand higher pressures (up to 200psi)
- Ability to be used at optimal flow rates for highest efficiency and resolution
- Ability to be used with higher flow rates to help reduce time and cost savings
- Higher capacity for higher sample loads
- Tight particle size distribution and minimal fines for low back pressure
- Auto-recognition tagging simplifies instrument operations by pre filling method parameters

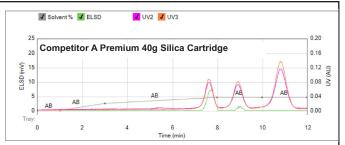


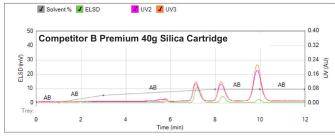
## Comparison of Phthalate Mixture 50mg each Using High Performance Flash Cartridges











	Reveleris® HP Flash Cartridge, 40g			Competitor A Premium Flash Cartridge, 40g			Competitor B Premium Flash Cartridge, 40g		
Sample	RT (min)	Efficiency Plates (N)	Resolution (Rs)	RT (min)	Efficiency Plates (N)	Resolution (Rs)	RT (min)	Efficiency Plates (N)	Resolution (Rs)
Diethyl phthalate	7.1	4736	2.59	7.6	2064	1.82	7.1	2586	1.92
Dimethyl phthalate	8.3	4986		8.9	2249		8.1	1485	
Propyl phthalate	10.5	4203	3.63	10.8	2120	2.16	9.9	3561	2.46

The purification chromatograms of the 3 phthalate mix and the calculated data clearly show the Reveleris® HP flash cartridges offer superior performance with greater efficiency and resolution, when compared with other competitive premium cartridges. Reveleris® HP flash cartridges allow you to achieve greater fraction purity, resulting in better resolution from more complex samples.

Reveleris® HP Flash Cartridges					
Description	Qty	Part No.			
Reveleris® HP 4g Cartridge	20/pkg	5170200			
Reveleris® HP 12g Cartridge	20/pkg	5170201			
Reveleris® HP 24g Cartridge	15/pkg	5170202			
Reveleris® HP 40g Cartridge	15/pkg	5170203			
Cartridges have a pressure rating of 200 psig					

Cartridges have a pressure rating of 200 psig

# **Contact your local Grace representative for more information**

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