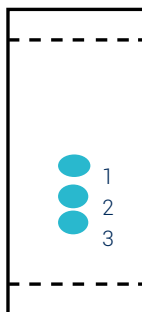




## 1. TLC method development

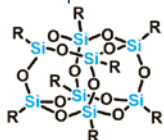


Mobile phase:  
70% Hexane / CH<sub>2</sub>Cl<sub>2</sub> 30%

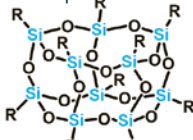
Compound	R <sub>f</sub>	CV
1	0.33	3.03
$\Delta CV_{2-1} = 0.54$		
2	0.28	3.57
$\Delta CV_{3-2} = 0.60$		
3	0.24	4.17

According to  $\Delta CV$  calculation, compounds 1 and 2 are difficult to separate.

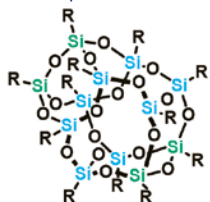
Compound 1



Compound 2



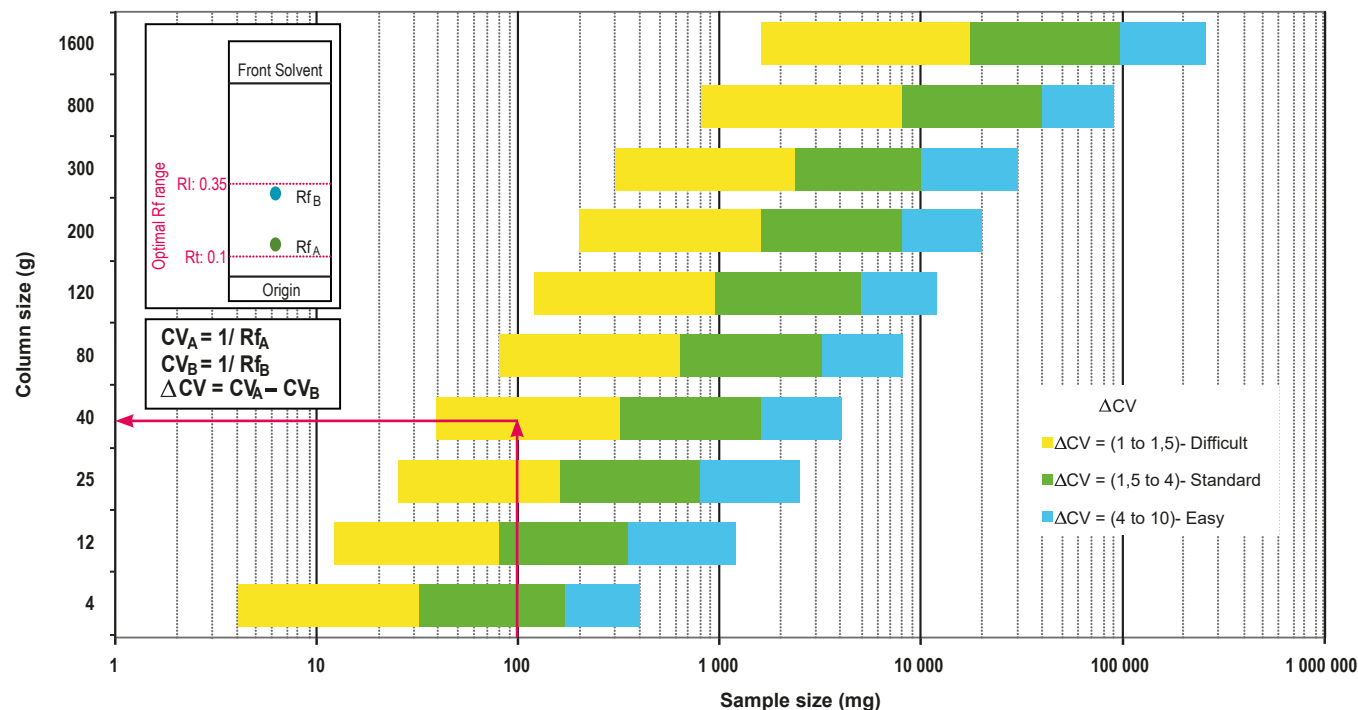
Compound 3



## 2. Choice of the column according to the $\Delta CV$ & crude sample mass

Crude sample: 100mg  
Column: PF-15SIHP-F0040  
Loading capacity: 0.25%

Loading Selection Guide for puriFlash® IR-50SI (Edition 2008-2017)



Customer has chosen to use a PF-15SIHP-F0040 column to obtain a better separation (efficiency & purity) than with a IR-50SI-F0040 column.

### 3. Flash conditions

Device: puriFlash® 450-iELSD (or now puriFlash® 5.050 pack iELSD)

Solvents: A: Hexane

B: CH<sub>2</sub>Cl<sub>2</sub>

Column: PF-15SIHP-F0040

Flow rate: 26mL/min

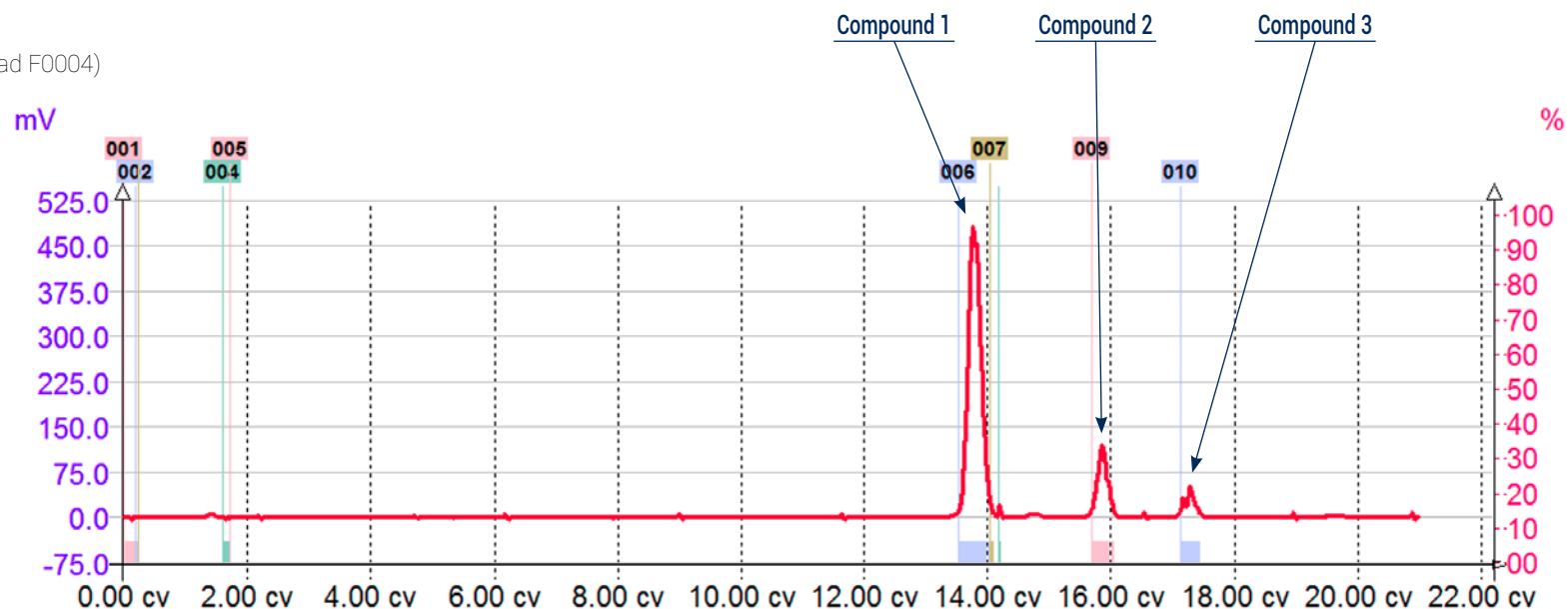
Injection mode: Solid deposit with celite (Dry-load F0004)

Crude sample: 100mg

Detection: ELSD with Automatic gain (SAGA)

Elution conditions:

CV	A (%)	B (%)
0	97	3
1	97	3
16	40	60
21	40	60



#### To achieve this purification:

##### You will need

- puriFlash® 5.050  
[Discover it](#) [Add to card](#)
- Integrated ELSD  
[Discover it](#) [Add to card](#)
- puriFlash® column PF-15SIHP-F0040  
[Discover it](#) [Add to card](#)
- puriFlash® Dry-load PF-DLE-F0004  
[Discover it](#) [Add to card](#)

##### We highly recommend

- Purge Valve + kit (for Flash configuration) AYHDV0 [Add to card](#)
- 13x100 mm Rack AYHE30 [Add to card](#)
- Tubes 13x100mm BH3901 [Add to card](#)

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"TLC to Flash & Prep Chromatography" to make your TLC developments easier and faster.

