

# CannFlash for the One-Step Separation of CBD, $\Delta^8$ -THC, $\Delta^9$ -THC, CBN, CBC, and CBL at High Loading Capacity of 6%



Santai Science Inc.

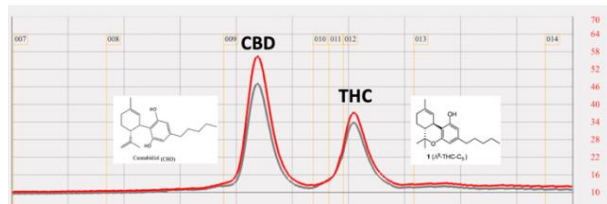
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§Synthèse AptoChem Inc.

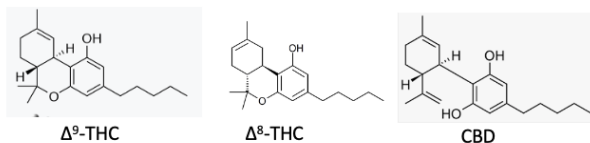
Chromatography Application Note  
ANSS-009

The effective and economic extraction of active cannabinoids from Cannabis is very important for this blossoming industry. However, cannabinoids are structural isomers or very similar in chemical structures which make their separation rather difficult. With the legalization of cannabis in Canada, **Santai Science** (Montreal, Canada) has accumulated in-depth knowledges in Cannabis purification. The effective isolation of CBD and THC are well documented in our previous application notes ANSS-001 and ANSS-007.

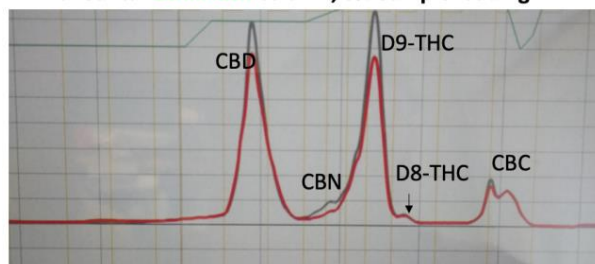
With Santai spherical C18 column SW5222, elution with H<sub>2</sub>O & MeOH



Recently, **Santai Science** has collaborated with **Synthèse AptoChem Inc** (Montreal, Canada), together we were able to isolate  $\Delta^8$ -THC from  $\Delta^9$ -THC by flash chromatography for the first time. This difficult separation has only been done by HPLC and UHPLC.

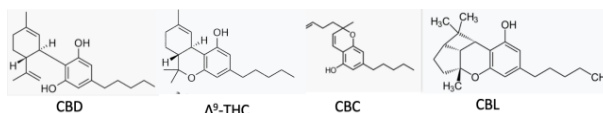


With Santai **CannFlash** column, 6% Sample loading



**Santai Science** has developed **CannFlash** column for Cannabis purification, which features a special blend of silica gel with unique interactions with the cannabinoids. Six different cannabinoids can be nicely separated in one-step, including four functional groups structural isomeric CBD (C<sub>21</sub>H<sub>30</sub>O<sub>2</sub>), THC (C<sub>21</sub>H<sub>30</sub>O<sub>2</sub>), CBL (Cannabicyclol, C<sub>21</sub>H<sub>30</sub>O<sub>2</sub>), CBC (Cannabichromene,

C<sub>21</sub>H<sub>30</sub>O<sub>2</sub>), and Minor cannabinoids CBN (Cannabinol, C<sub>21</sub>H<sub>26</sub>O<sub>2</sub>).



Our **CannFlash** also features a high sample loading capacity of 6% which is 200% higher than the regular C18 column. Our special treatment of the silica gel also allows this column to be reusable more than 20 times.



More info on the **CannFlash** can be found in our website as well as the instruction sheet of our **CannFlash** column kits.

**CannFlash Cannabis Specialty Cartridge**  
High-efficiency spherical C4~8, 20-45 μm, 100 Å, ID: 071029 (NEW Product)  
( carbon content 10%, end-capping, surface area 320 m<sup>2</sup>/g, loading capacity 0.1-6%)  
※ Compatible with all flash chromatography systems on the market.

Item Number	Column Size	Sample Size	Flow Rate (mL/min)	Cartridge Length(cm)	Cartridge ID (mm)	Max. Pressure (psi/bar)	Quantity per Box
SW-SCAN-004-SP	5.4 g	5.4 mg-324 mg	5-15	113.8	12.4	400/27.5	2
SW-SCAN-012-SP	20 g	20 mg-1.2 g	10-25	134.8	21.4	400/27.5	1
SW-SCAN-025-SP	33 g	33 mg-1.98 g	10-25	184.0	21.4	400/27.5	1
SW-SCAN-040-SP	48 g	48 mg-2.88 g	15-30	184.4	26.7	400/27.5	1
SW-SCAN-080-SP	105 g	105 mg-6.3 g	20-50	257.4	31.2	350/24.0	1
SW-SCAN-120-SP	155 g	155 mg-9.3 g	30-60	261.5	38.6	300/20.7	1
SW-SCAN-220-SP	300 g	300 mg-18.0 g	40-80	223.5	61.4	300/20.7	1
SW-SCAN-330-SP	420 g	420 mg-25.2 g	40-80	280.2	61.4	250/17.2	1

§Synthèse AptoChem Inc (7171 Rue Frederick Banting, Saint-Laurent, QC H4S 1Z9) is authorized to conduct analytical testing on Cannabis and to process Cannabis under the Canadian Cannabis Act.

**Santai Science Inc.** **Santai Science Inc.**  
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