

Alltesta HPLC Analyzer

Analysis of Pesticides, Dyes, and Drugs

SiELC



“Your Analysis. Your Life. Simplified.”

Affordability. Accuracy. Assurance.

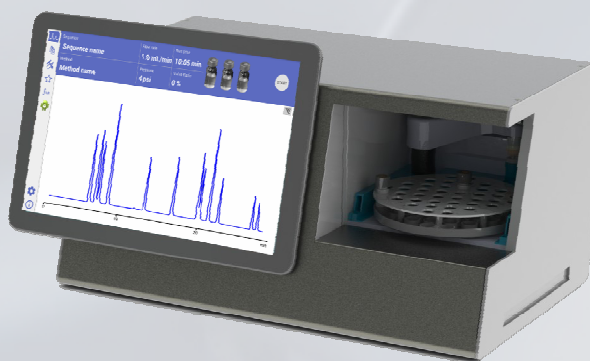
With over 50,000 packed columns, 20 proprietary phases, and dozens of years of HPLC experience, SIELC Technologies knows chromatography.

Today, SIELC is proud to introduce the **Alltesta HPLC-Based Analyzer**: the simple, cost-effective solution to HPLC separations that offers outstanding performance and superior repeatability.

Equip your lab with the latest in HPLC separation technology. The Alltesta HPLC-Based Analyzer offers a user-friendly interface designed for intuitive operation by non-experienced personnel.

The Analyzer is lightweight and streamlined in comparison to leading industry models, yet it does not compromise separation quality.

Maximize your efficiency. Minimize your footprint.



Alltesta Analyzer Small-Footprint Design

Easy on your Mind. Easy on your Budget. Just Plain Easy.

Minimal Sample Preparation.

Patented wash system uses a trap column and constant recovery wash to eliminate interference due to sample matrix and enable direct injection of complex samples, including milk.

No Bulky Hardware.

Away with the monitors, desktops, and towering HPLC machines. The Alltesta HPLC-Based Analyzer comes complete with all of the hardware required in its efficient 8"x13"x7" frame and 22 lbs.

Equipped for Out-of-the-Box Use.

Includes supplies for 200 analyses. Everything from vials and standard solutions, to the separation and trap columns, is included with the Alltesta HPLC-Based Analyzer. So you can get started right away.

Designed to Meet your Needs.

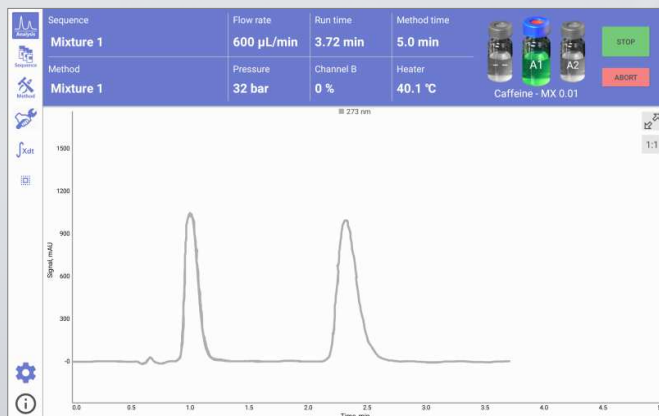
An adjustable needle depth, easily removable tray, flexible communication protocol, and up to 0.2 mL injection capacity are just some of the features that enable the Alltesta HPLC-Based Analyzer to fit your laboratory's requirements.



Simplify your Separations.

A vast library of methods is at your fingertips, with separations averaging just 15 minutes.

All methods meet FDA and ICH specifications, leaving you one less detail to worry about.



Streamlined Interface

Experience the Analyzer's Renowned Sensitive Side.



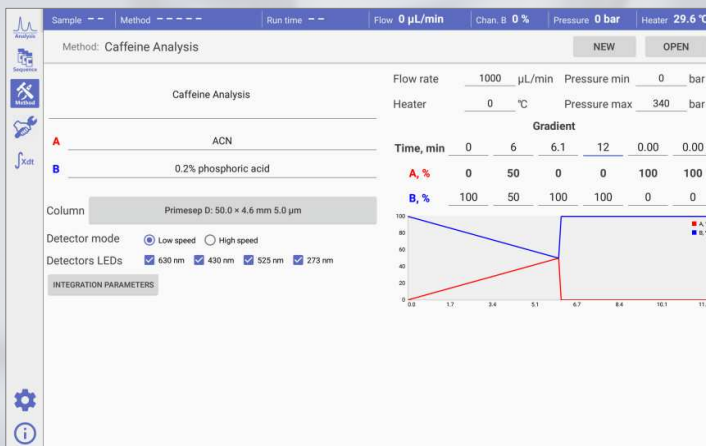
Powerful Data Analysis

Detect trace amounts of analyte – down to 1 part per million.

Analyze data with superior precision, using a long-lasting light source with low noise and a start time of less than one minute.

A Place in your Laboratory for the Analyzer. (A Small Place.)

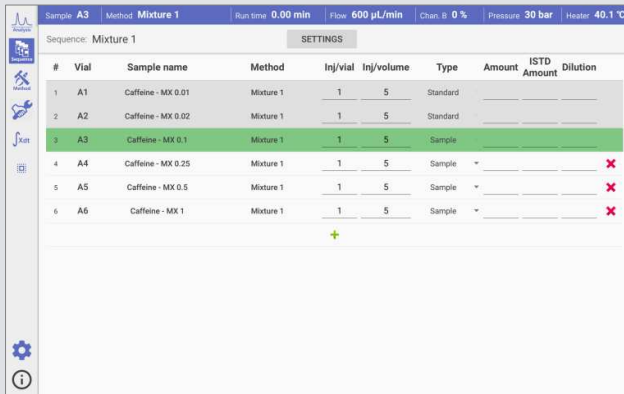
Compact size and weight make the Alltesta HPLC-Based Analyzer the perfect choice for the laboratory seeking to maximize space efficiency without compromising powerful functionality.



Hassle-Free Experimental Setup



Bring the Flow back to Workflow.



Sample: A3 Method: Mixture 1 Run time: 0.00 min Flow: 600 µL/min Chan: B 0% Pressure: 30 bar Heater: 40.1 °C

Sequence: Mixture 1 SETTINGS

#	Vial	Sample name	Method	Inj/vial	Inj/volume	Type	Amount	ISTD Amount	Dilution
1	A1	Caffeine - MX 0.01	Mixture 1	1	5	Standard			
2	A2	Caffeine - MX 0.02	Mixture 1	1	5	Standard			
3	A3	Caffeine - MX 0.1	Mixture 1	1	5	Sample			
4	A4	Caffeine - MX 0.25	Mixture 1	1	5	Sample			✗
5	A5	Caffeine - MX 0.5	Mixture 1	1	5	Sample			✗
6	A6	Caffeine - MX 1	Mixture 1	1	5	Sample			✗

Easily navigable interface saves you time and headache.

Space-efficient panel layout means greater organization of experimental data and fewer windows to wade through.

Starts up in less than 1 minute, so you don't have to wait to separate.

Complete Confidence in the Alltesta HPLC-Based Analyzer.

Backed by a 1 year warranty and lifetime email and phone support. Guaranteed to fulfill your laboratory's needs. Trusted by numerous multinational organizations and government laboratories in the United States.

Have complete confidence in the friendly, knowledgeable scientists at SIELC, who have brought tens of thousands of columns and countless hours of method development services to companies all over the world, just like yours.

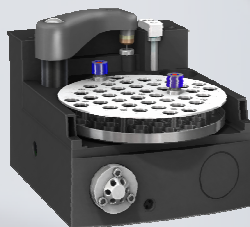
Have complete confidence in the Alltesta HPLC-Based Analyzer.

Full Line of Original Equipment Manufacturer (OEM) Products

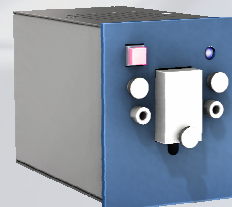
Pump



Autosampler



Detector



SIELC Technologies, Inc.
804 Seton Court, Wheeling, IL 60090
(847) 299-2629
mail@sielc.com

Analysis of Pesticides & Contaminants

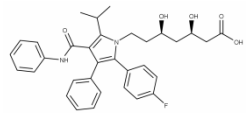
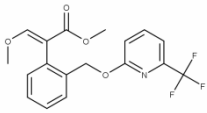
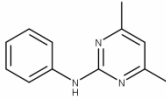
Contaminants in Tea

Pesticides, which include herbicides, fungicides, and insecticides, are essential to the agriculture industry as a means of maximizing crop yields. However, these compounds often persist through the manufacturing process and appear in consumer products, where they may cause unknown health effects.

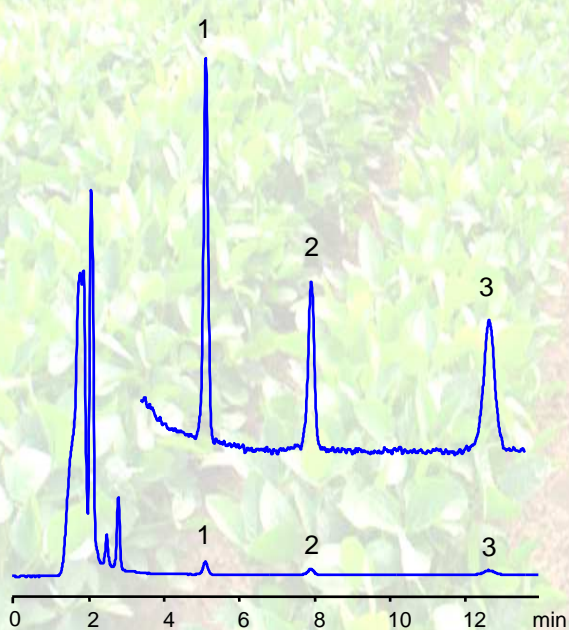
This analysis includes several common pesticides, as well as other chemicals known to contaminate food and natural water sources.

Column: Primesep 200
Size: 4.6 x 150 mm
Mobile phase: 50% MeCN, 0.05% H₃PO₄
Flow: 1.0 mL/min
Detection: 270 nm

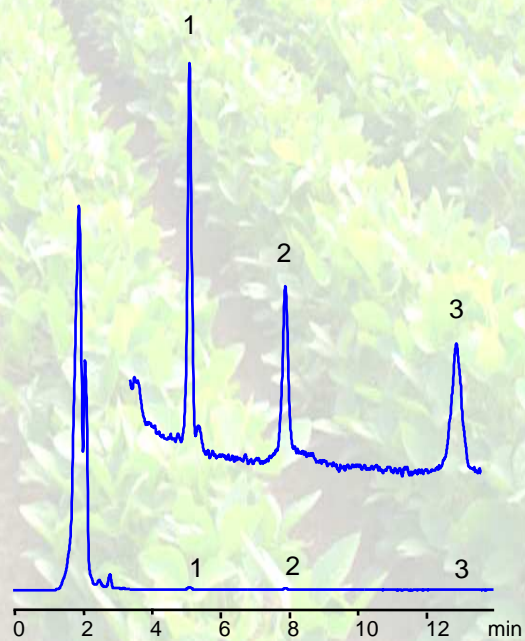
Sample preparation:
 - Tea spiked with 0.005 mg/mL in 1:1 MeCN:water

#	Compound	Structure
1	Atorvastatin	
2	Picoxystrobin	
3	Pyrimethanil	

Black Tea



Green Tea

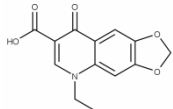

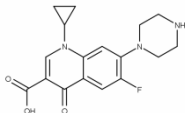
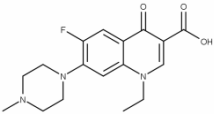
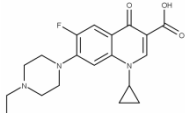


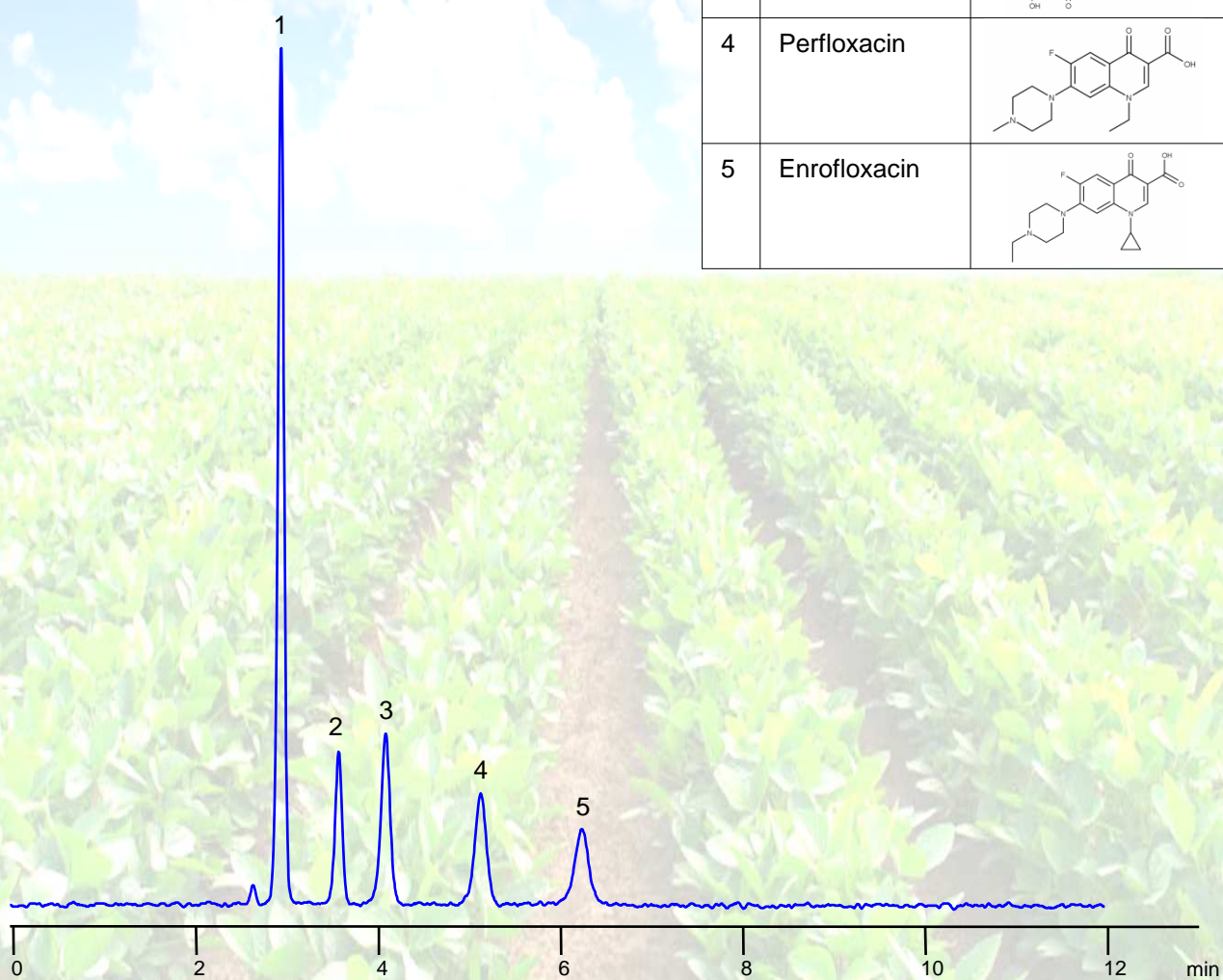
Analysis of Pesticides & Contaminants

Antibiotics in Seafood

Column: Primesep 100
Size: 4.6 x 150 mm
Mobile phase: 50% MeCN, 0.20% H₂SO₄
Flow: 1.0 mL/min
Detection: 270 nm

Sample preparation:
- 0.02 mg/mL in 1:1 MeCN:water

#	Compound	Structure
1	Oxolinic acid	
2	Flumequine	
3	Ciprofloxacin	
4	Perfloxacin	
5	Enrofloxacin	

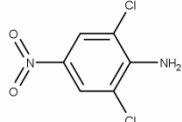
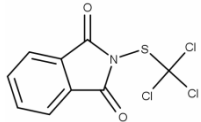
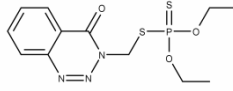
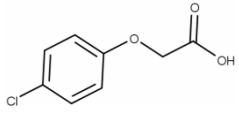
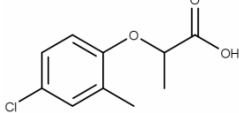
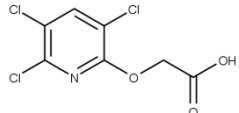
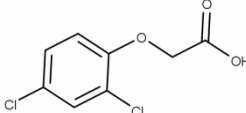


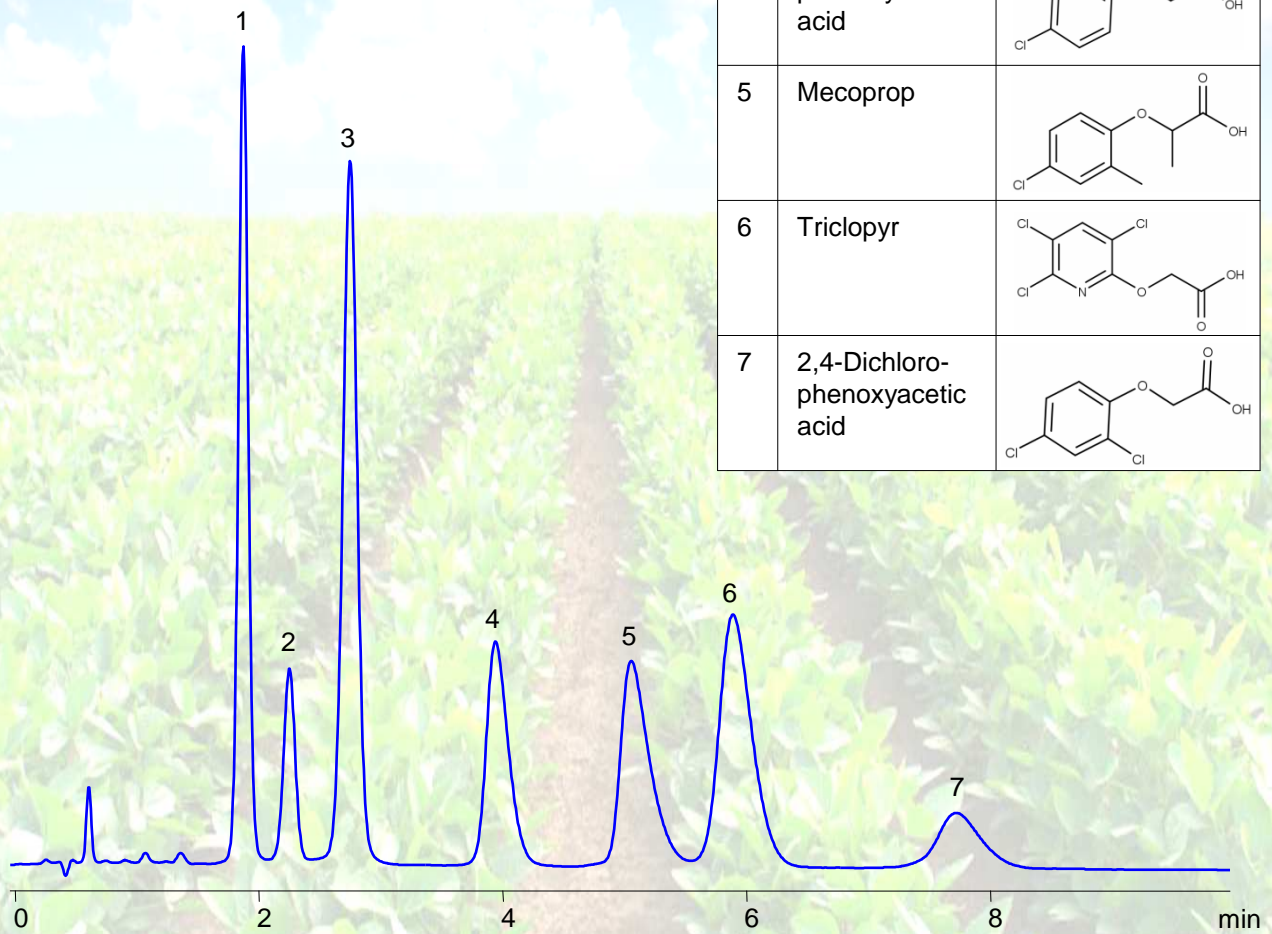
Analysis of Pesticides & Contaminants

Pesticides in a Mixture

Column: Primesep D
Size: 3.2 x 50 mm
Mobile phase: 35% MeCN, 0.30% H₃PO₄
Flow rate: 0.6 mL/min
Detection: 270 nm

Sample preparation:
 - 1 mg/mL in 1:1 MeCN:water

#	Compound	Structure
1	Dichloran	
2	Folpet	
3	Azinphos-ethyl	
4	4-Chloro-phenoxyacetic acid	
5	Mecoprop	
6	Triclopyr	
7	2,4-Dichloro-phenoxyacetic acid	

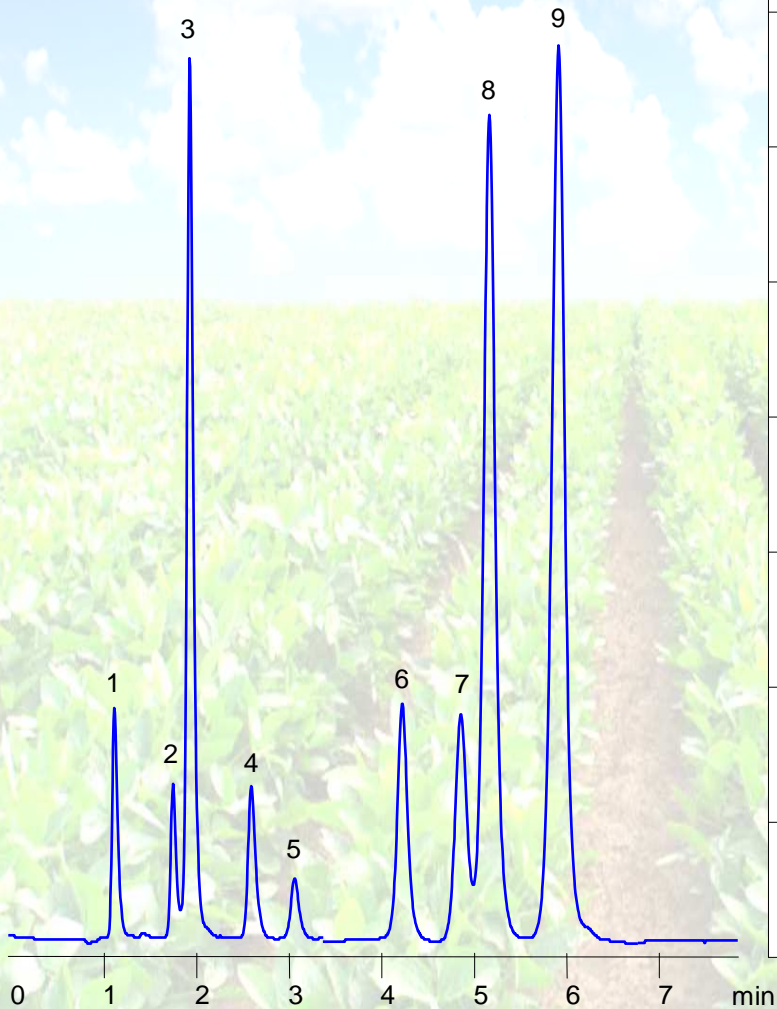


Analysis of Pesticides & Contaminants

Pesticides in a Mixture

Column: Primesep 200
Size: 3.2 x 100 mm
Mobile phase: 40% MeCN, 0.30% H₃PO₄
Flow rate: 0.6 mL/min
Detection: 270 nm

Sample preparation:
 - 1 mg/mL in 1:1 MeCN:water



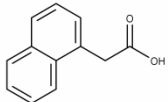
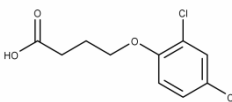
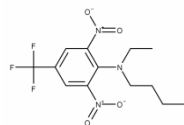
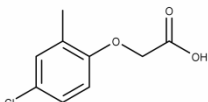
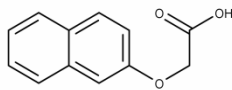
#	Compound	Structure
1	Monocrotophos	<chem>CN(C)C(=O)C=COP(=O)(OC)OC</chem>
2	Thiabendazole	<chem>C1=CN=C(S1)-c2c[nH]c3ccccc23</chem>
3	Carbofuran	<chem>CN(C)C(=O)Oc1ccc2c(c1)OC(C)(C)C2</chem>
4	Carboxin	<chem>CN(C)C(=O)Nc1ccccc1C2=CC(=O)OCC2</chem>
5	Diphenamid	<chem>CN(C)C(=O)C(c1ccccc1)c2ccccc2</chem>
6	Triadimefon	<chem>CN1C=NC=N1C(=O)C(C)(C)Oc2ccc(Cl)cc2</chem>
7	Folpet	<chem>ClC(Cl)(Cl)S(=O)(=O)N1C(=O)c2ccccc2C1=O</chem>
8	Dichloro-butrazole	<chem>CN1C=NC=N1C(O)C(C)(C)Cc2ccc(Cl)cc2</chem>
9	Diazinon	<chem>CCOP(=S)(OCC)Oc1nc(C)cnc1</chem>
10	Azinphos-ethyl	<chem>CCOP(=S)(OCC)Sc1nc2ccccc2n1</chem>

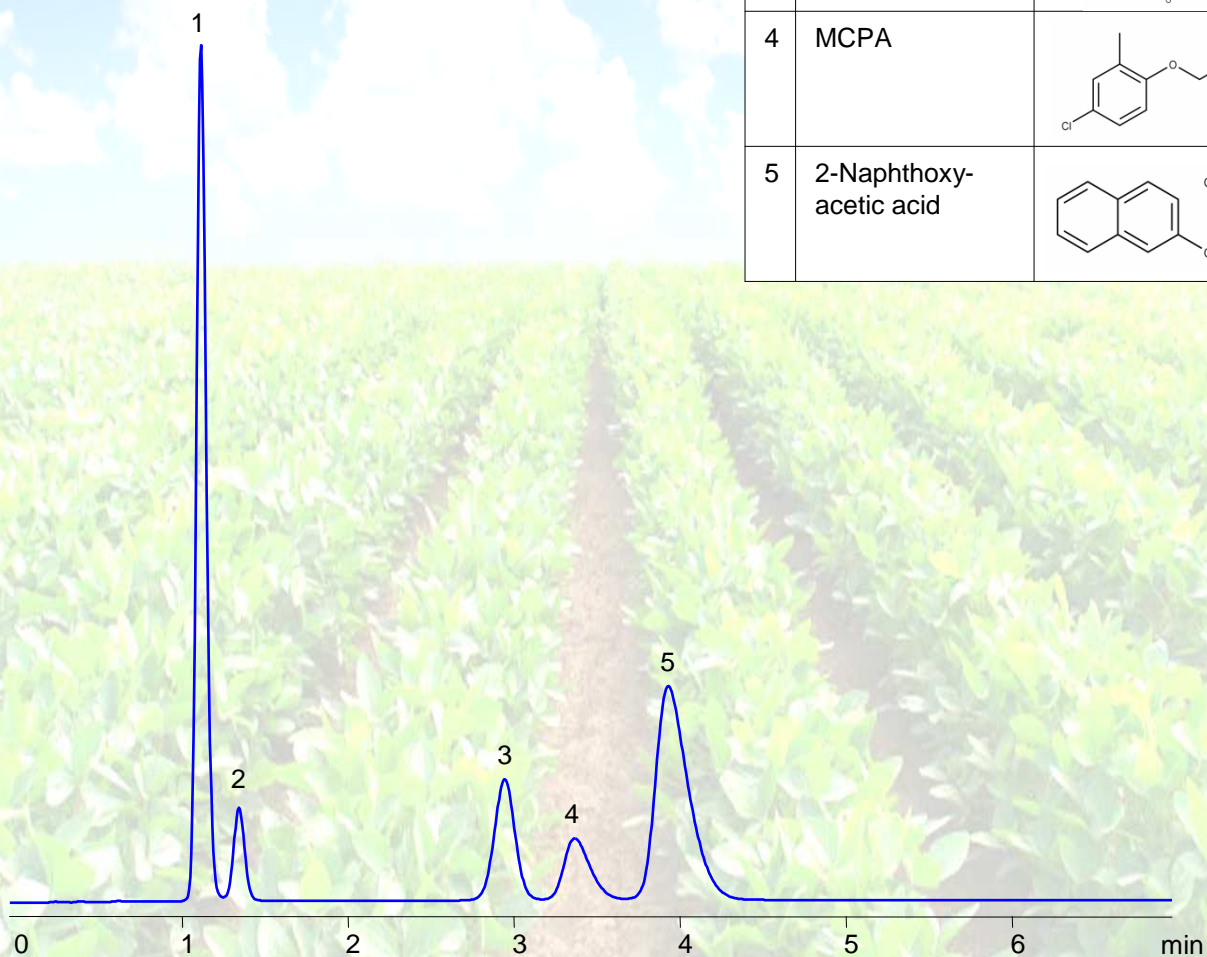
Analysis of Pesticides & Contaminants

Pesticides in a Mixture

Column: Primesep D
Size: 3.2 x 100 mm
Mobile phase: 45% MeCN, 0.15% H₃PO₄
Flow rate: 0.6 mL/min
Detection: 270 nm

Sample preparation:
- 1 mg/mL in 1:1 MeCN:water

#	Compound	Structure
1	1-Naphthylacetic acid	
2	2,4-DB	
3	Benfluralin	
4	MCPA	
5	2-Naphthoxyacetic acid	



Analysis of Food Dyes in Consumer Products

Dyes in a Mixture

Despite the abundant use of artificial coloring agents by food, beverage, and pharmaceutical manufacturers to enhance their products' appearance, food dyes are tightly regulated because of health concerns regarding their use.

Of the 7 dyes generally permitted in consumer products by the Food and Drug Administration (FDA), the following 5 dyes were analyzed:

- Brilliant Blue (Blue #1)
- Sunset Yellow (Yellow #6)
- Allura Red (Red #40)
- Tartrazine (Yellow #5)
- Erythrosine (Red #3)

The remaining dyes are Indigo Carmine (Blue #2) and Fast Green FCF (Green #3).

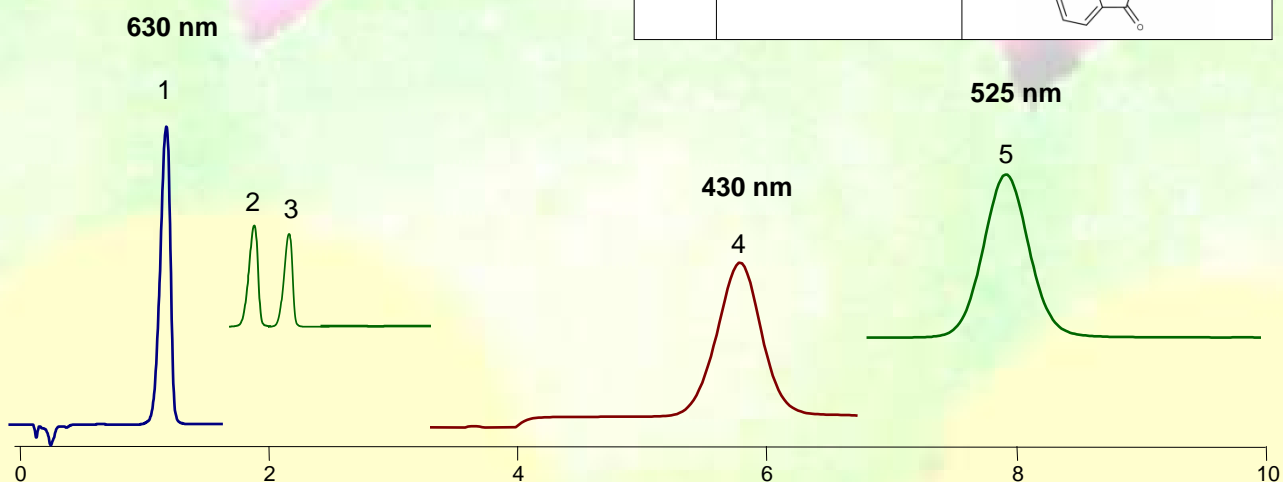
* * * *

Column: Obelisc N
Size: 3.2 x 50 mm
Mobile phase: MeCN 50%; AmFm pH 3.0, 70 mmol
Flow rate: 0.6 mL/min

Sample preparation:






- 0.1 mg/mL solutions of dyes were prepared in water
- 1 drop of each solution was combined and diluted with 1 mL of 1:1 MeCN:water

#	Compound	Structure
1	Brilliant Blue (Blue #1)	
2	Sunset Yellow (Yellow #6)	
3	Allura Red (Red #40)	
4	Tartrazine (Yellow #5)	
5	Erythrosine (Red #3)	



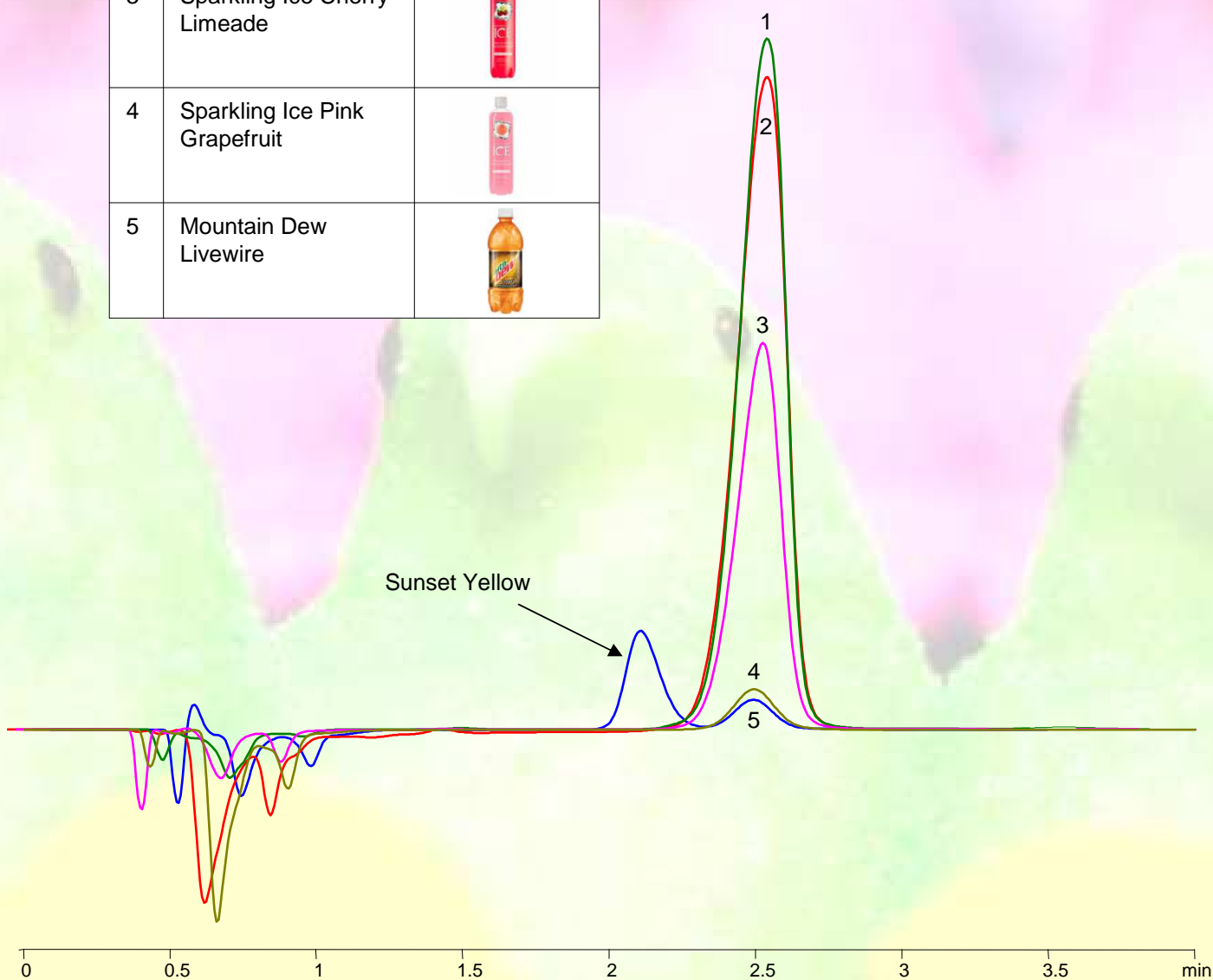
Analysis of Food Dyes in Consumer Products

Relative Abundance of Allura Red in Soft Drinks

#	Product	Image
1	Powerade Zero Fruit Punch	
2	Nice! Black Raspberry	
3	Sparkling Ice Cherry Limeade	
4	Sparkling Ice Pink Grapefruit	
5	Mountain Dew Livewire	

Column: Obelisc N
Size: 3.2 x 50 mm
Mobile phase: MeCN 50%; AmFm pH 3.0, 70 mmol
Flow rate: 0.6 mL/min
Detection: 525 nm

Sample preparation:
- 0.02 mg/mL in 1:1 MeCN:water

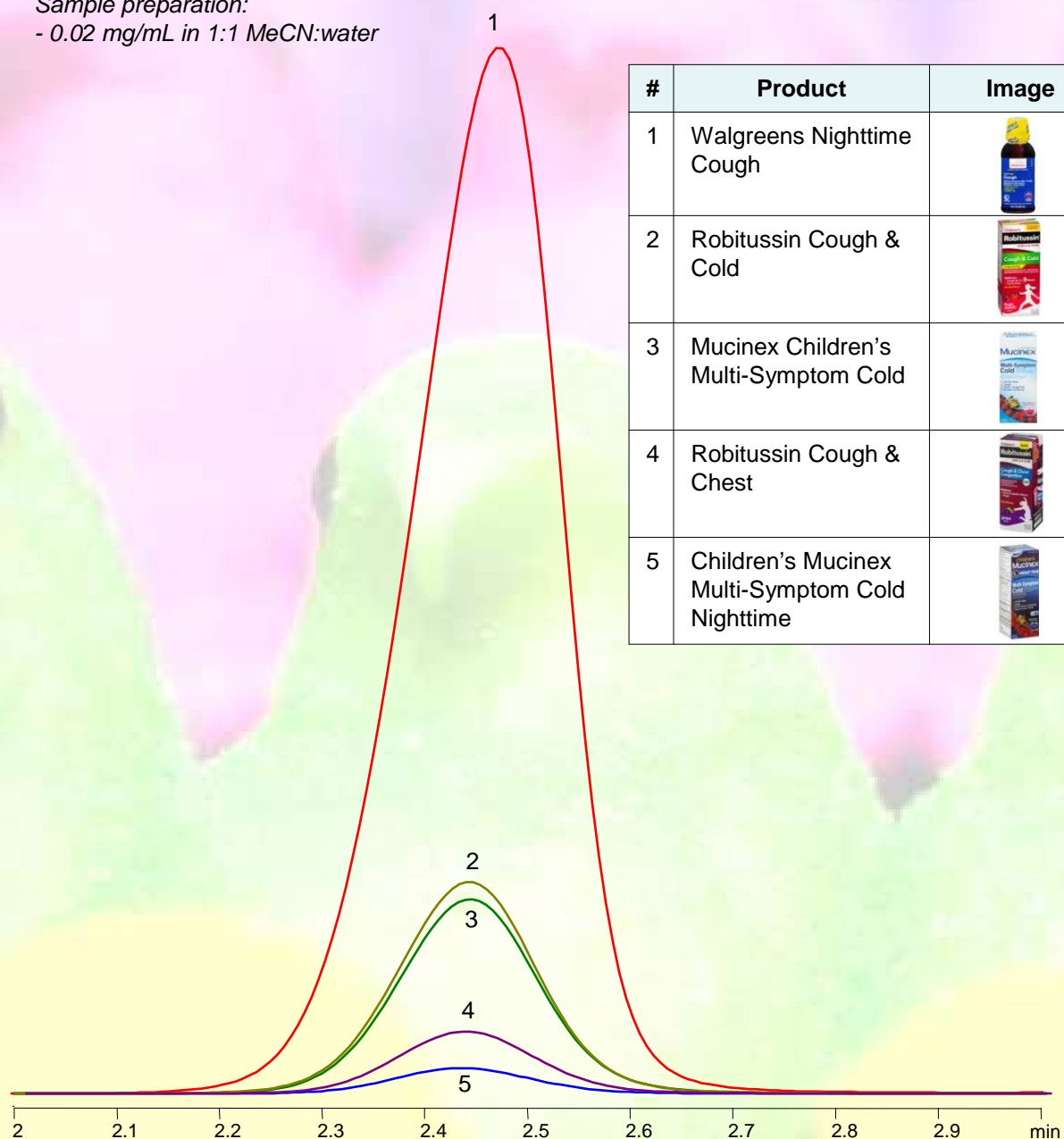


Analysis of Food Dyes in Consumer Products

Relative Abundance of Allura Red in OTC Drugs

Column: Obelisc N
Size: 3.2 x 50 mm
Mobile phase: MeCN 50%; AmFm pH 3.0, 70 mmol
Flow rate: 0.6 mL/min
Detection: 525 nm

Sample preparation:
- 0.02 mg/mL in 1:1 MeCN:water



#	Product	Image
1	Walgreens Nighttime Cough	
2	Robitussin Cough & Cold	
3	Mucinex Children's Multi-Symptom Cold	
4	Robitussin Cough & Chest	
5	Children's Mucinex Multi-Symptom Cold Nighttime	

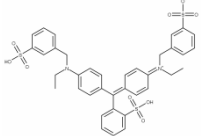
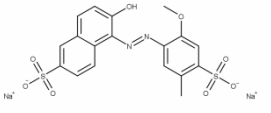
Analysis of Food Dyes in Consumer Products

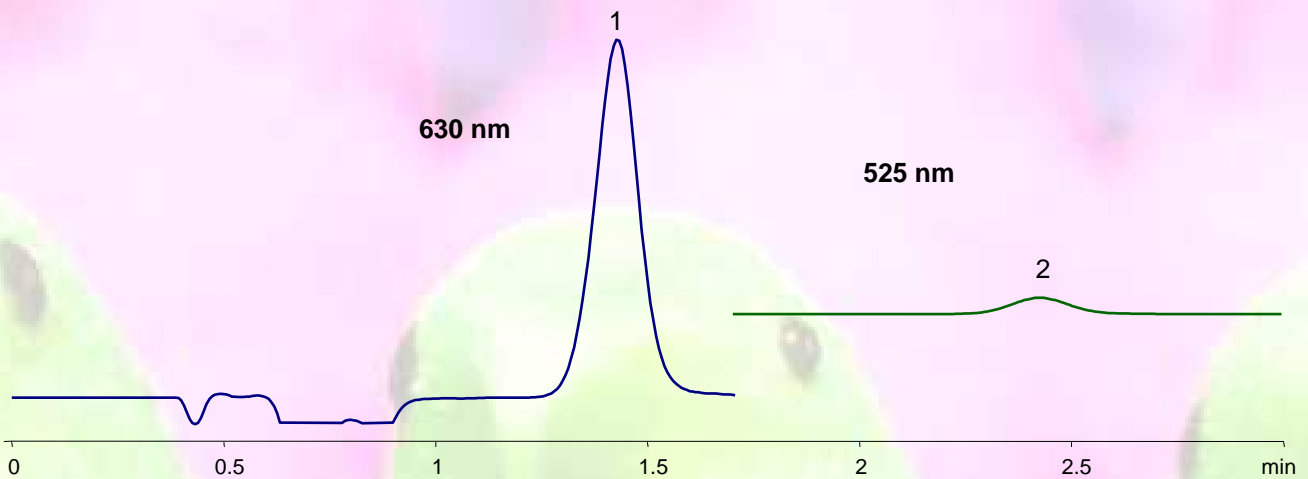
Dyes in OTC Drugs

Children's Mucinex Multi-Symptom Cold Nighttime

Column: Obelisc N
Size: 3.2 x 50 mm
Mobile phase: MeCN 50%; AmFm pH 3.0, 70 mmol
Flow rate: 0.6 mL/min

Sample preparation:
 - 1 mL was diluted 10-fold in 1:1 MeCN:water

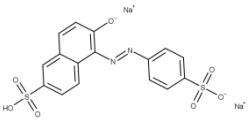
#	Compound	Structure
1	Brilliant Blue	
2	Allura Red	

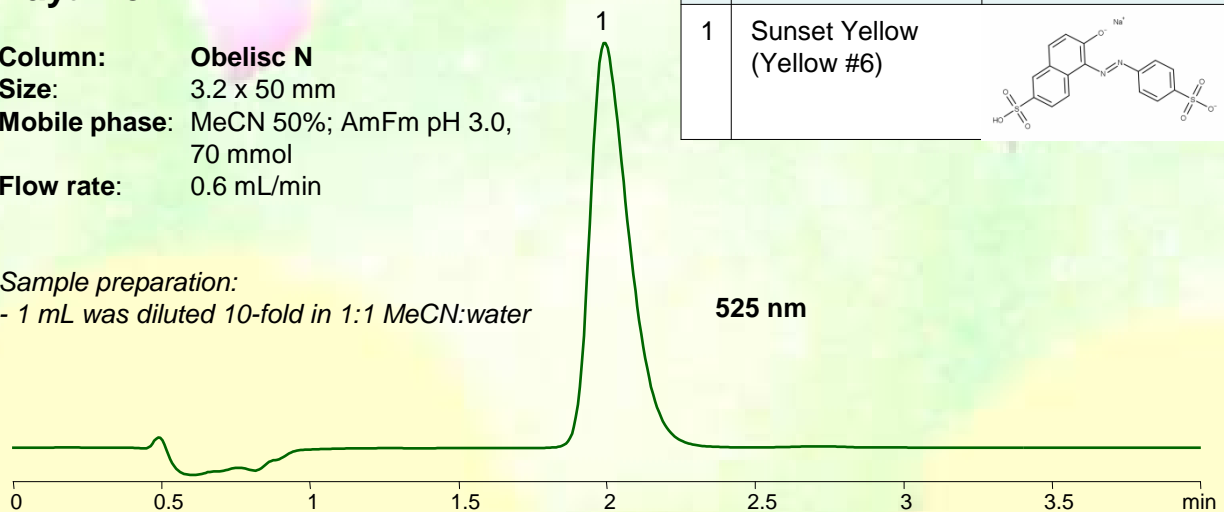


Walgreens Cold & Flu Non-Drowsy Daytime

Column: Obelisc N
Size: 3.2 x 50 mm
Mobile phase: MeCN 50%; AmFm pH 3.0, 70 mmol
Flow rate: 0.6 mL/min

Sample preparation:
 - 1 mL was diluted 10-fold in 1:1 MeCN:water

#	Compound	Structure
1	Sunset Yellow (Yellow #6)	



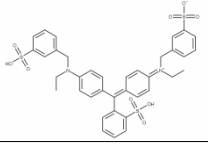
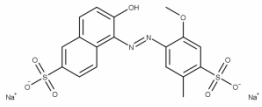
Analysis of Food Dyes in Consumer Products

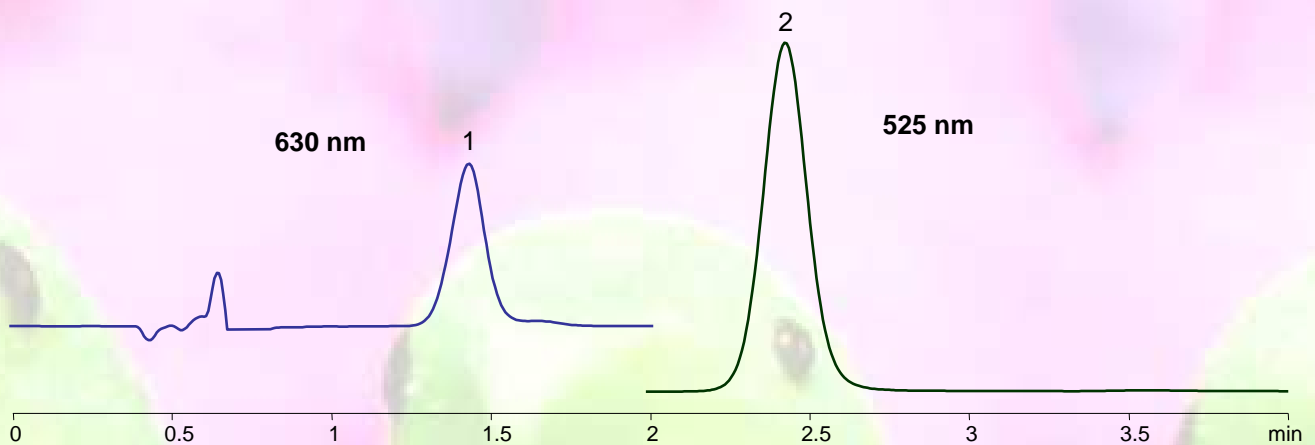
Dyes in OTC Drugs

Dimetapp Cold & Cough

Column: Obelisc N
Size: 3.2 x 50 mm
Mobile phase: MeCN 50%; AmFm pH 3.0, 70 mmol
Flow rate: 0.6 mL/min

Sample preparation:
 - 1 mL was diluted 10-fold in 1:1 MeCN:water

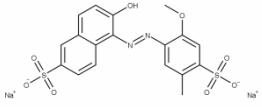
#	Compound	Structure
1	Brilliant Blue	
2	Allura Red	

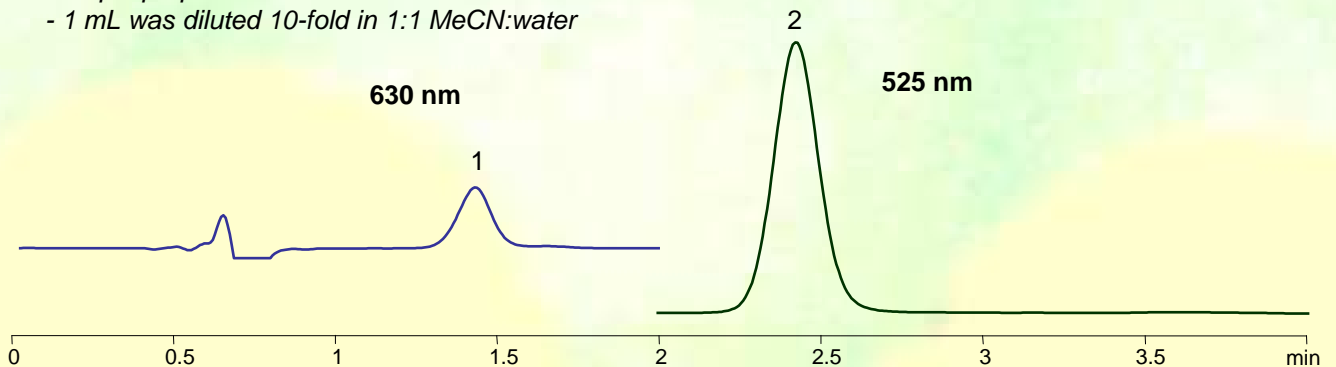


Robitussin Cough & Chest

Column: Obelisc N
Size: 3.2 x 50 mm
Mobile phase: MeCN 50%; AmFm pH 3.0, 70 mmol
Flow rate: 0.6 mL/min

Sample preparation:
 - 1 mL was diluted 10-fold in 1:1 MeCN:water

#	Compound	Structure
1	Allura Red	



Analysis of Prescription and Over-the-Counter Drugs

Blood-Thinning Medications

Prescription drugs differ from over-the-counter (OTC) drugs in that they are vulnerable to misuse and abuse, and thus require a prescription. Compared to OTC drugs, prescription drugs:

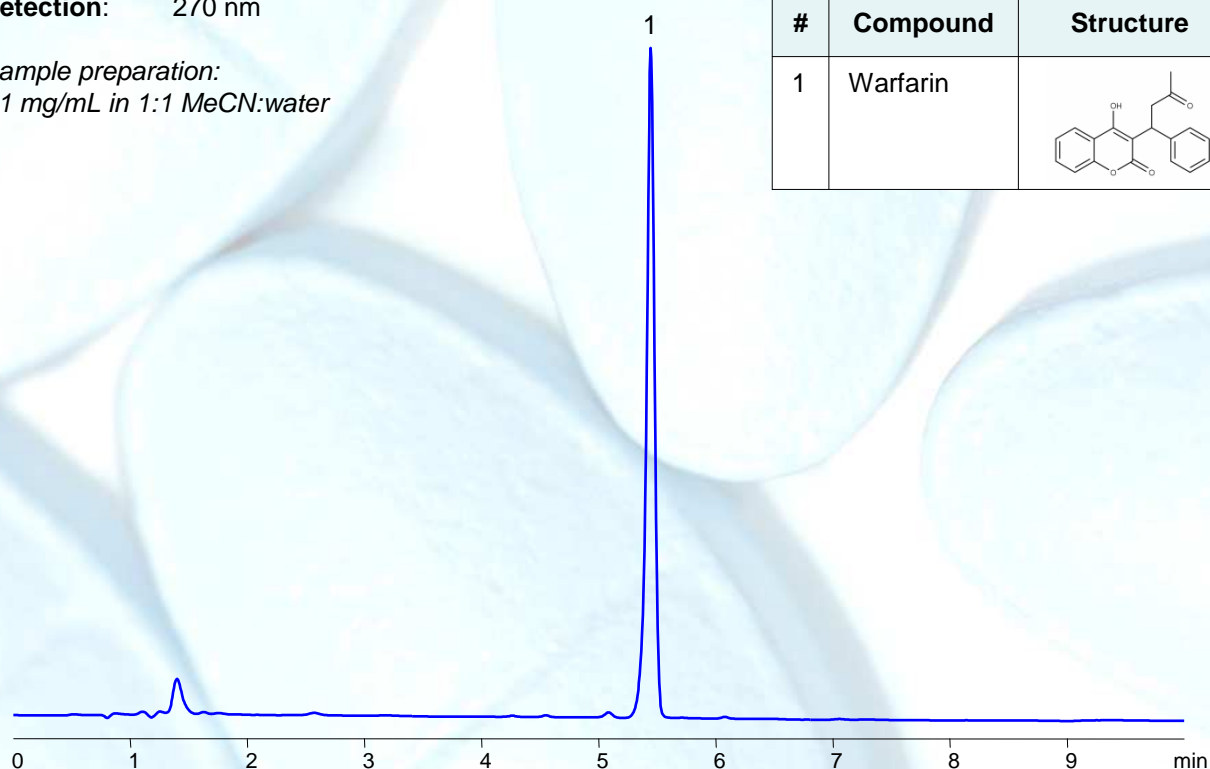
1. Treat conditions that may require care from a medical professional
2. Contain active ingredients that may inherently be more potent or present in higher concentrations
3. Cause effects that may be psychoactive in nature
4. Target microorganisms and may contribute to microorganism resistance

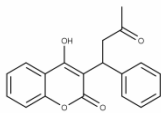
For these reasons, prescription drugs are tightly regulated by the Food and Drug Administration (FDA). The following chromatographic analysis includes a diverse sampling of prescription and OTC drugs.

Warfarin

Column: Primesep 200
Size: 3.2 x 100 mm
Mobile phase: MeCN 25-70% in 5 min, 4 min hold
H₃PO₄ 0.05% to 0.3% in 5 min, 4 min hold
Flow rate: 0.6 mL/min
Detection: 270 nm

Sample preparation:
- 1 mg/mL in 1:1 MeCN:water



#	Compound	Structure
1	Warfarin	

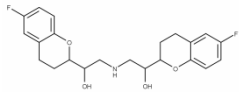
Analysis of Prescription and Over-the-Counter Drugs

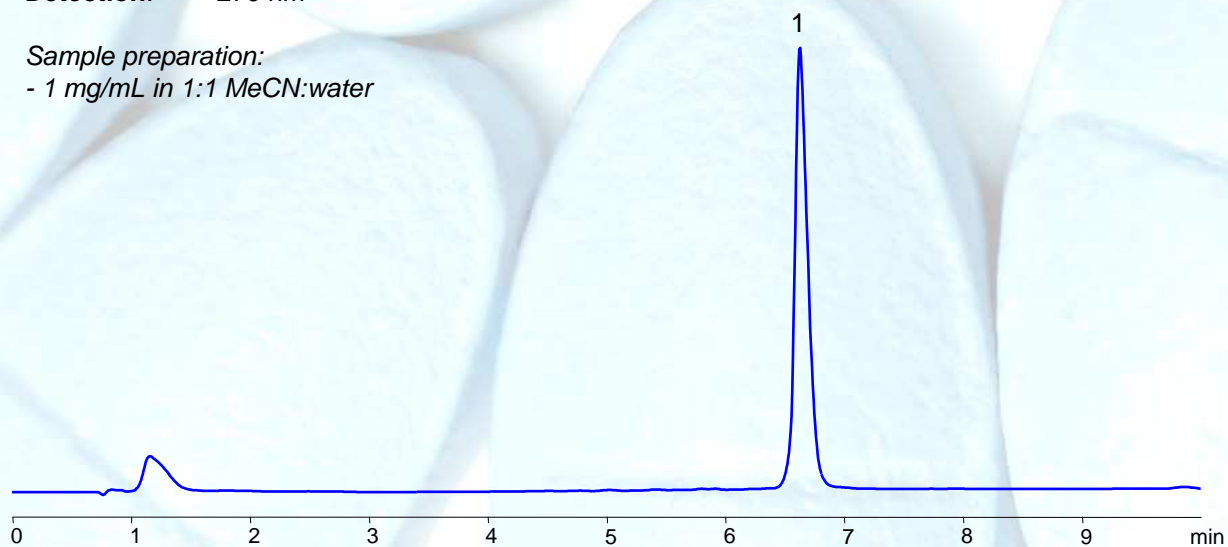
Antihypertensive Medications

Bystolic

Column: Primesep 200
Size: 3.2 x 100 mm
Mobile phase: MeCN from 30-65% in 5 min, 4 min hold
H₃PO₄ from 0.05-0.3% in 5 min, 4 min hold
Flow rate: 0.6 mL/min
Detection: 270 nm

Sample preparation:
- 1 mg/mL in 1:1 MeCN:water

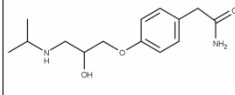
#	Compound	Structure
1	Bystolic	

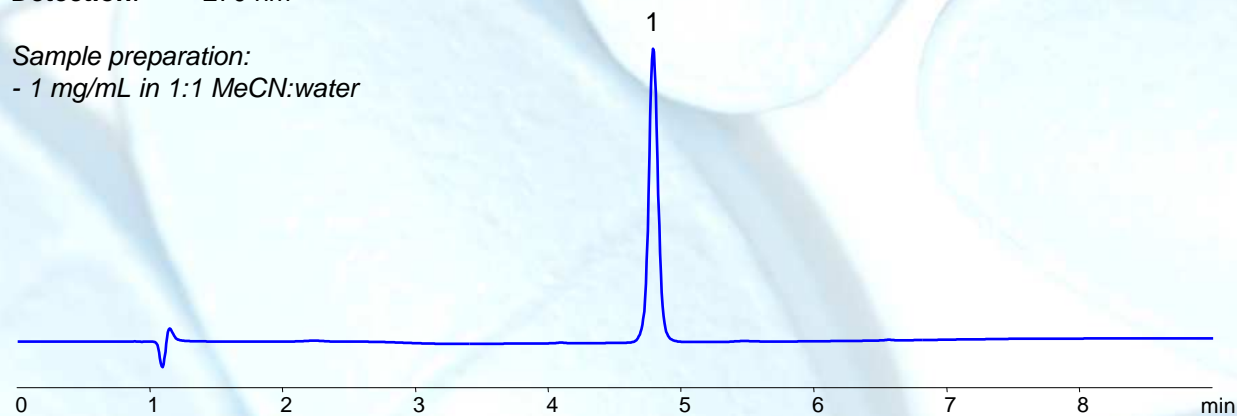


Atenolol

Column: Primesep 200
Size: 3.2 x 100 mm
Mobile phase: MeCN from 5-50% in 5 min, 4 min hold
H₃PO₄ from 0.05-0.3% in 5 min, 4 min hold
Flow rate: 0.6 mL/min
Detection: 270 nm

Sample preparation:
- 1 mg/mL in 1:1 MeCN:water

#	Compound	Structure
1	Atenolol	



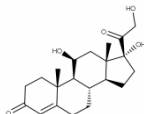
Analysis of Prescription and Over-the-Counter Drugs

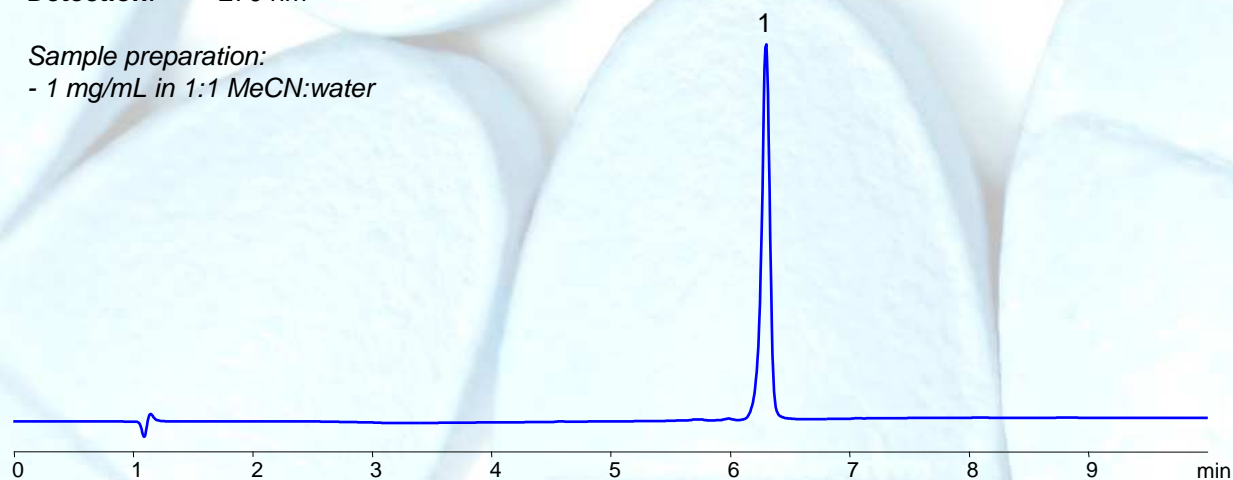
Anti-Inflammatory Medications

Hydrocortisone

Column: Primesep 200
Size: 3.2 x 100 mm
Mobile phase: MeCN from 5-50% in 5 min, 4 min hold
H₃PO₄ from 0.05-0.3% in 5 min, 4 min hold
Flow rate: 0.6 mL/min
Detection: 270 nm

Sample preparation:
- 1 mg/mL in 1:1 MeCN:water

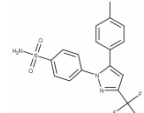
#	Compound	Structure
1	Hydrocortisone	

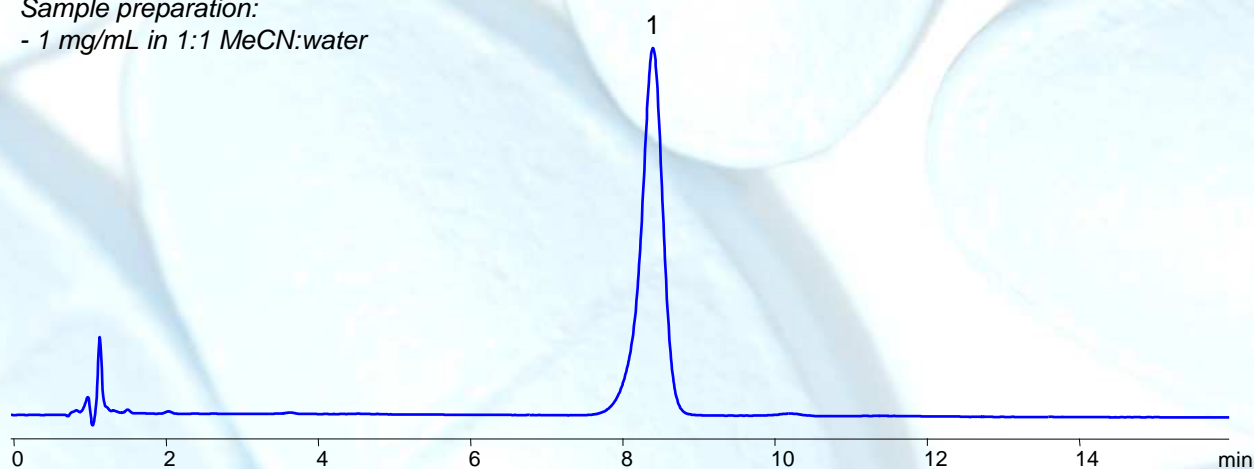


Celebrex

Column: Primesep 200
Size: 3.2 x 100 mm
Mobile phase: MeCN 40% with 0.1% H₃PO₄
Flow rate: 0.6 mL/min
Detection: 270 nm

Sample preparation:
- 1 mg/mL in 1:1 MeCN:water

#	Compound	Structure
1	Celebrex	



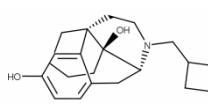
Analysis of Prescription and Over-the-Counter Drugs

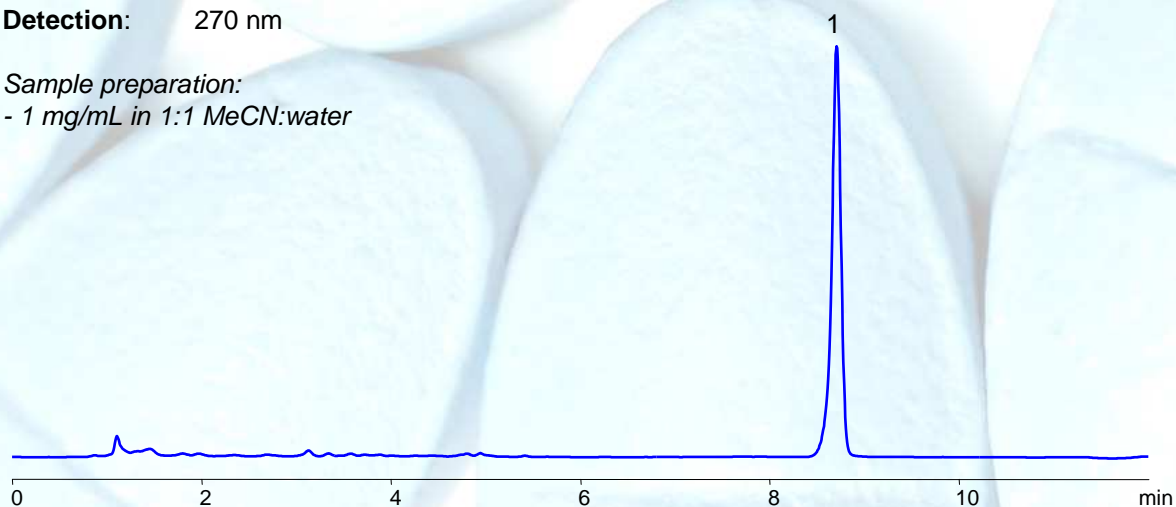
Painkiller Medications

Butorphanol

Column: Primesep 200
Size: 3.2 x 100 mm
Mobile phase: MeCN 5-50% in 5 min, 4 min hold
H₃PO₄ 0.05% to 0.3% in 5 min, 4 min hold
Flow rate: 0.6 mL/min
Detection: 270 nm

Sample preparation:
- 1 mg/mL in 1:1 MeCN:water

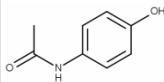
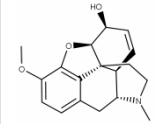
#	Compound	Structure
1	Butorphanol	



Co-Codamol

Column: Primesep 200
Size: 3.2 x 100 mm
Mobile phase: MeCN 5-50% in 5 min, 4 min hold
H₃PO₄ 0.05% to 0.3% in 5 min, 4 min hold
Flow rate: 0.6 mL/min
Detection: 270 nm

Sample preparation:
- 1 mg/mL in
1:1 MeCN:water

#	Compound	Structure
1	Acetaminophen	
2	Codeine	



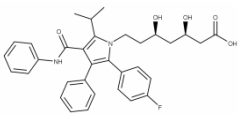
Analysis of Prescription and Over-the-Counter Drugs

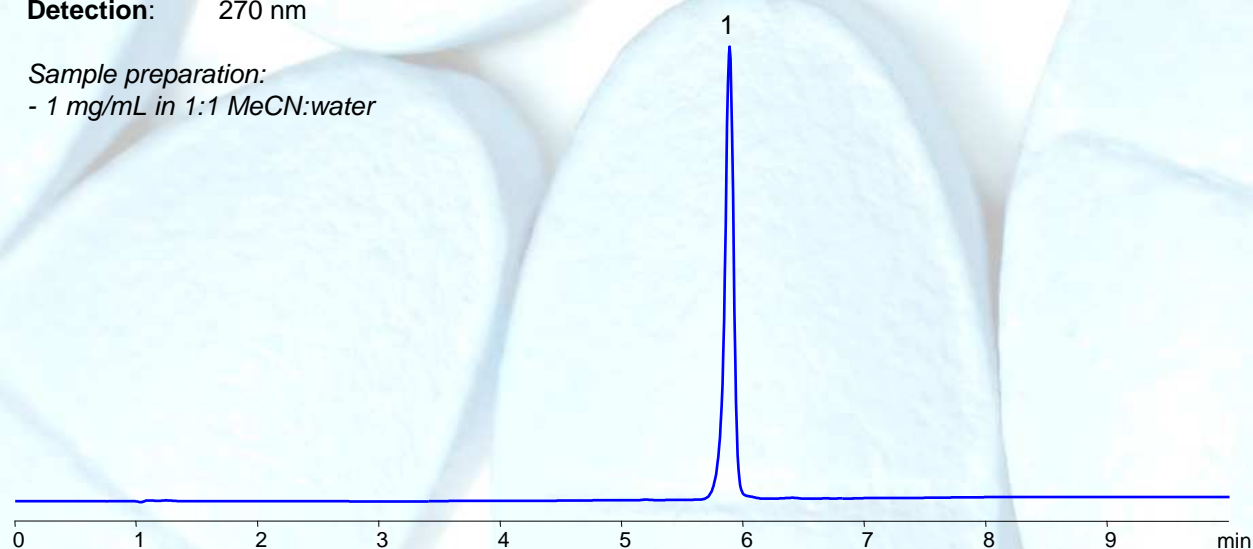
Cholesterol Medications

Atorvastatin (Lipitor)

Column: Primesep 200
Size: 3.2 x 100 mm
Mobile phase: MeCN 30-65% in 5 min, 4 min hold
H₃PO₄ 0.05-0.3% in 5 min, 4 min hold
Flow rate: 0.6 mL/min
Detection: 270 nm

Sample preparation:
- 1 mg/mL in 1:1 MeCN:water

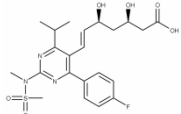
#	Compound	Structure
1	Atorvastatin	

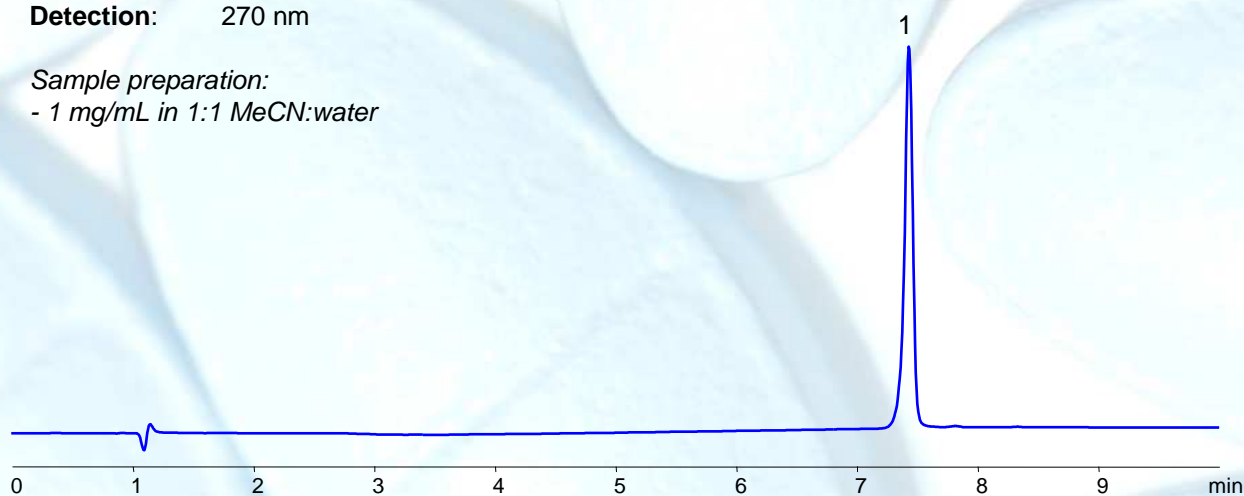


Rosuvastatin (Crestor)

Column: Primesep 200
Size: 3.2 x 100 mm
Mobile phase: MeCN 5-50% in 5 min, 4 min hold
H₃PO₄ 0.05-0.3% in 5 min, 4 min hold
Flow rate: 0.6 mL/min
Detection: 270 nm

Sample preparation:
- 1 mg/mL in 1:1 MeCN:water

#	Compound	Structure
1	Rosuvastatin	

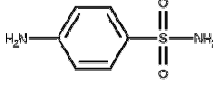
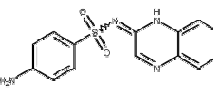
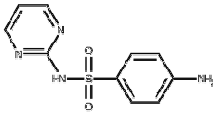
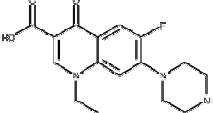
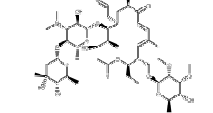
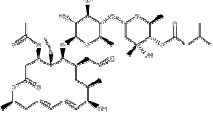
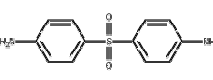
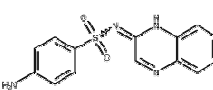
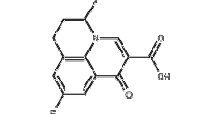


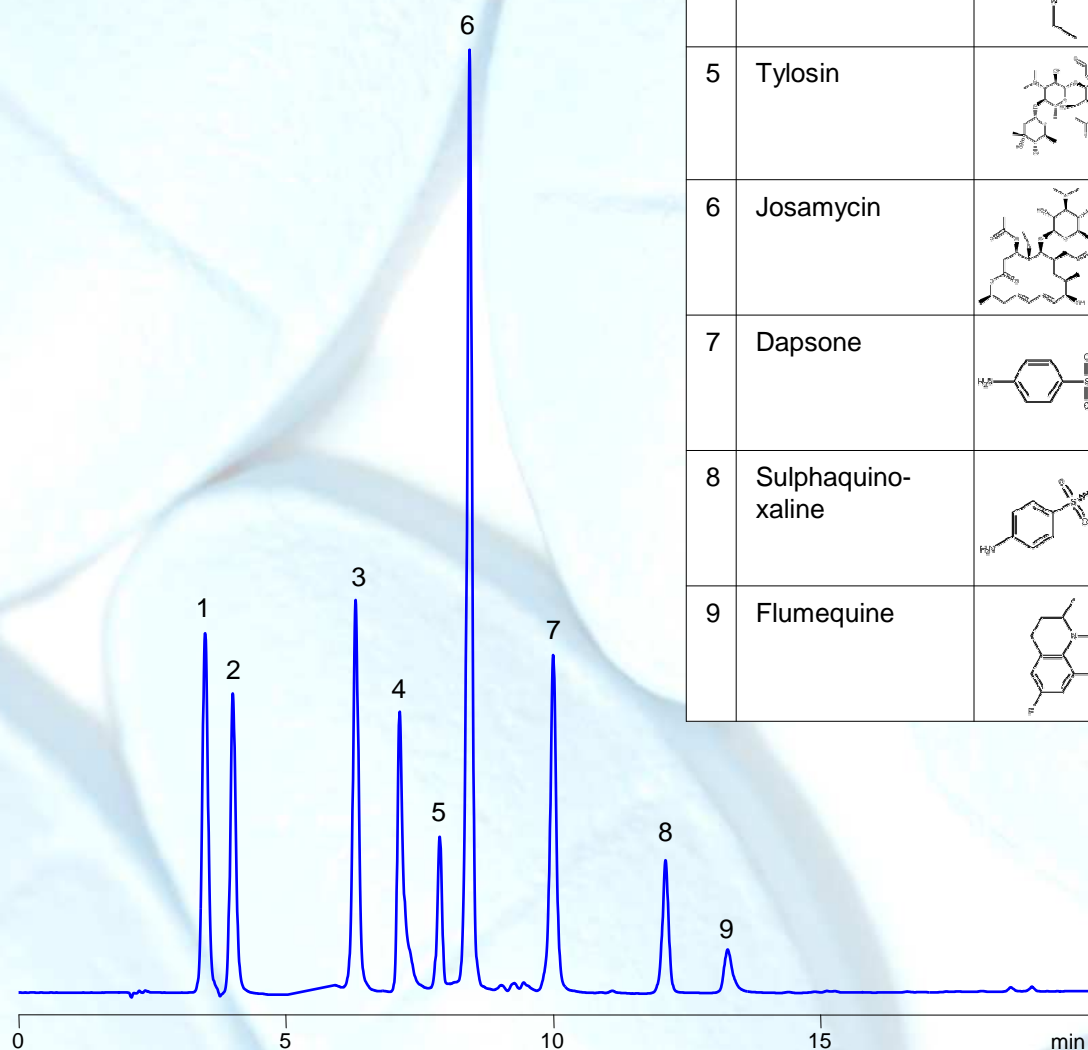
Analysis of Prescription and Over-the-Counter Drugs

Antibiotics in a Mixture

Column: Obelisc R
Size: 4.6 x 150 mm
Mobile phase: MeCN 0-25% in 6 min, then 70% for 14 min
 Formic acid 0.05-0.3% in 6 min, 14 min hold
Flow: 1.0 mL/min
Detection: UV 270 nm

Sample preparation:
 - 0.1 mg/mL was dissolved in 1:1 MeCN:water

#	Compound	Structure
1	Sulphanilamide	
2	Sulfaguanidine	
3	Sulfadiazine	
4	Norfloxacin	
5	Tylosin	
6	Josamycin	
7	Dapsone	
8	Sulphaquinoxaline	
9	Flumequine	



Analysis of Prescription and Over-the-Counter Drugs

Over-the-Counter Drugs

Tylenol Severe Allergy Maximum Strength Nighttime

Mini Tabs – 24 count

Active Ingredients	Amount (per caplet)
Diphenhydramine HCl	12.5 mg
Pseudoephedrine HCl	30 mg
Acetaminophen	500 mg

Inactive ingredients: carnauba wax, cellulose, corn starch, D&C Yellow #10, FD&C Blue #1, hypromellose, iron oxide, magnesium stearate, polyethylene glycol, polysorbate 80, sodium citrate, sodium starch glycolate, titanium dioxide

Column: Primesep 200

Size: 3.2 x 100 mm

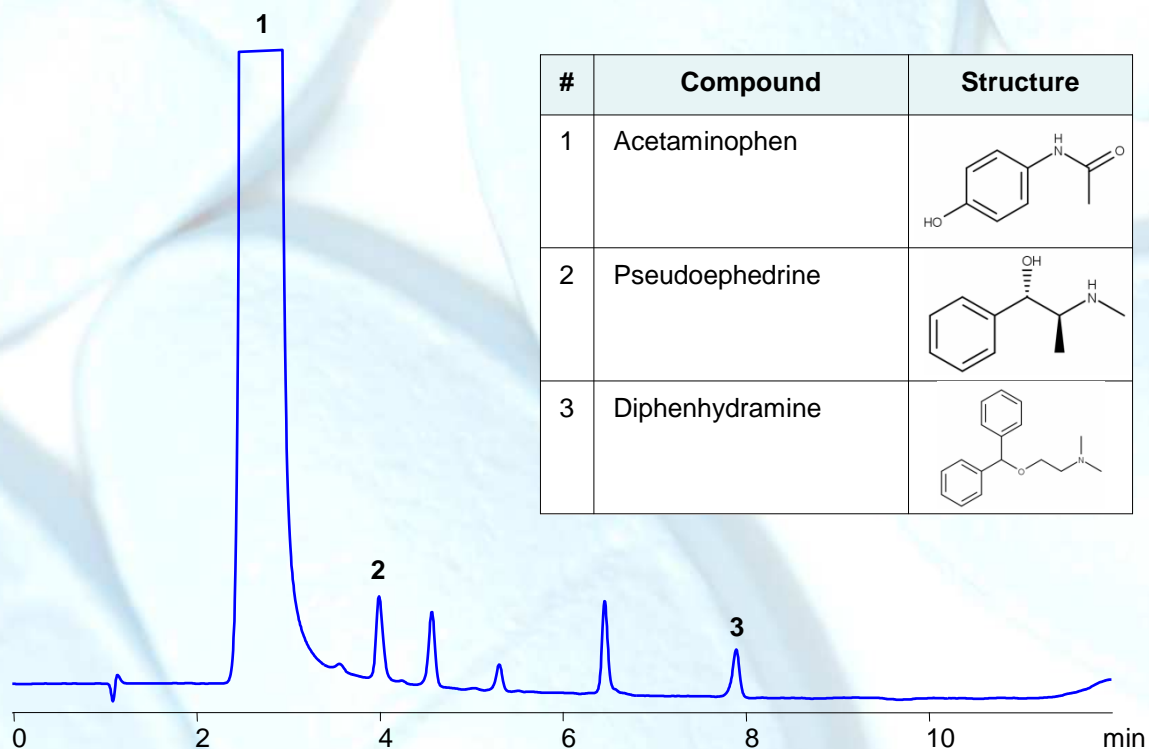
Mobile phase: Gradient MeCN 5-50% in 5 min, 4 min hold
H₂SO₄ gradient 0.03% to 0.2% in 5 min, 4 min hold

Flow: 0.6 mL/min

Detection: UV 270 nm

Sample preparation:

- 1 mini tab was crushed using a mortar and pestle
- Crushed mini tab was mixed with 25 mL of 1:1 MeCN:water and stirred for 15 min
- Mixture was filtered using a 0.45 µm HPLC syringe filter



Analysis of Prescription and Over-the-Counter Drugs

Over-the-Counter Drugs

Tylenol Cold & Flu Severe

Caplets – 24 count

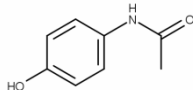
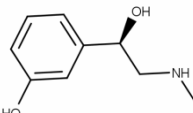
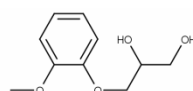
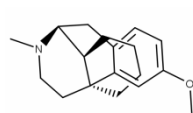
Active Ingredients	Amount (per caplet)
Acetaminophen	325 mg
Dextromethorphan HBr	10 mg
Guaifenesin	200 mg
Phenylephrine HBr	5 mg

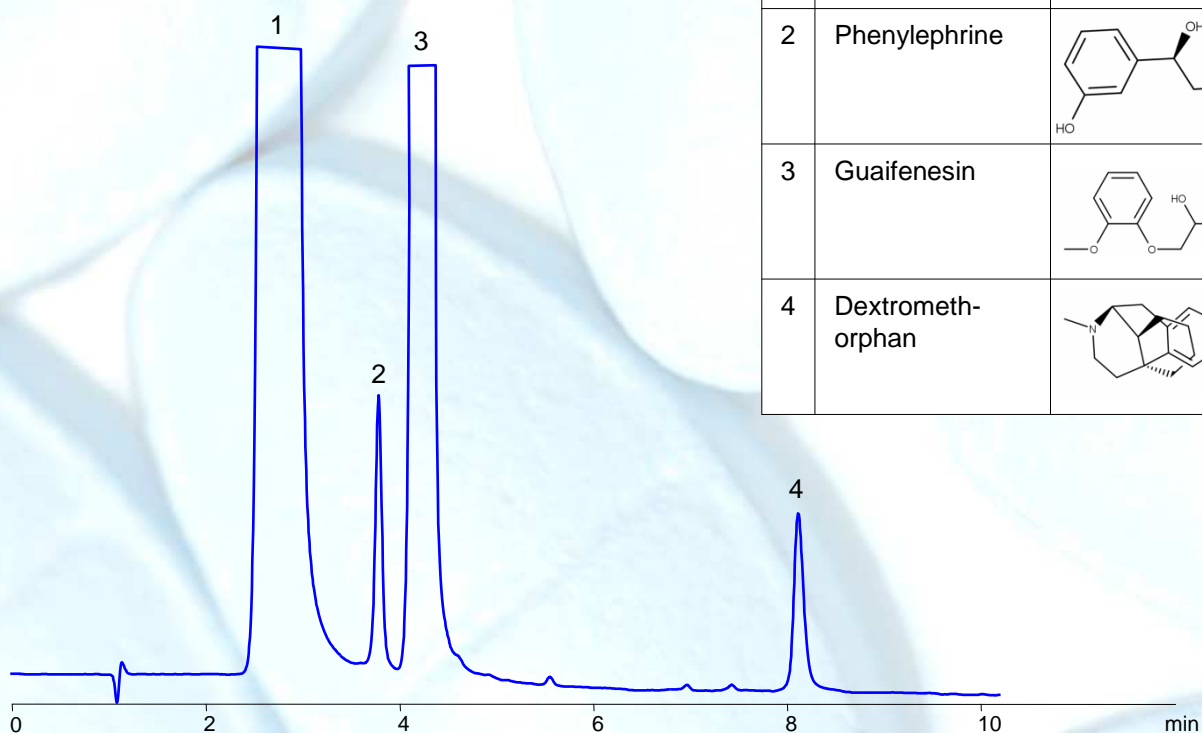
Inactive ingredients: corn starch, crospovidone, D&C yellow #10 aluminum lake, flavor, magnesium stearate, maltodextrin, microcrystalline cellulose, polyethylene glycol, polyvinyl alcohol, povidone, silicon dioxide, sodium starch glycolate, stearic acid, sucralose, talc, titanium dioxide

Column: Primesep 200
Size: 3.2 x 100 mm
Mobile phase: Gradient MeCN 5-50% in 5 min, 4 min hold
 H3PO4 gradient 0.05% to 0.3% in 5 min, 4 min hold
Flow: 0.6 mL/min
Detection: UV 270 nm

Sample preparation:

- 1 caplet was crushed using a mortar and pestle
- Crushed caplet was mixed with 25 mL of 1:1 MeCN:water and stirred for 15 min
- Mixture was filtered using a 0.45 um HPLC syringe filter

#	Compound	Structure
1	Acetaminophen	
2	Phenylephrine	
3	Guaifenesin	
4	Dextromethorphan	



Analysis of Prescription and Over-the-Counter Drugs

Over-the-Counter Drugs

Tylenol Cold Multi-Symptom Daytime

Caplets – 24 count

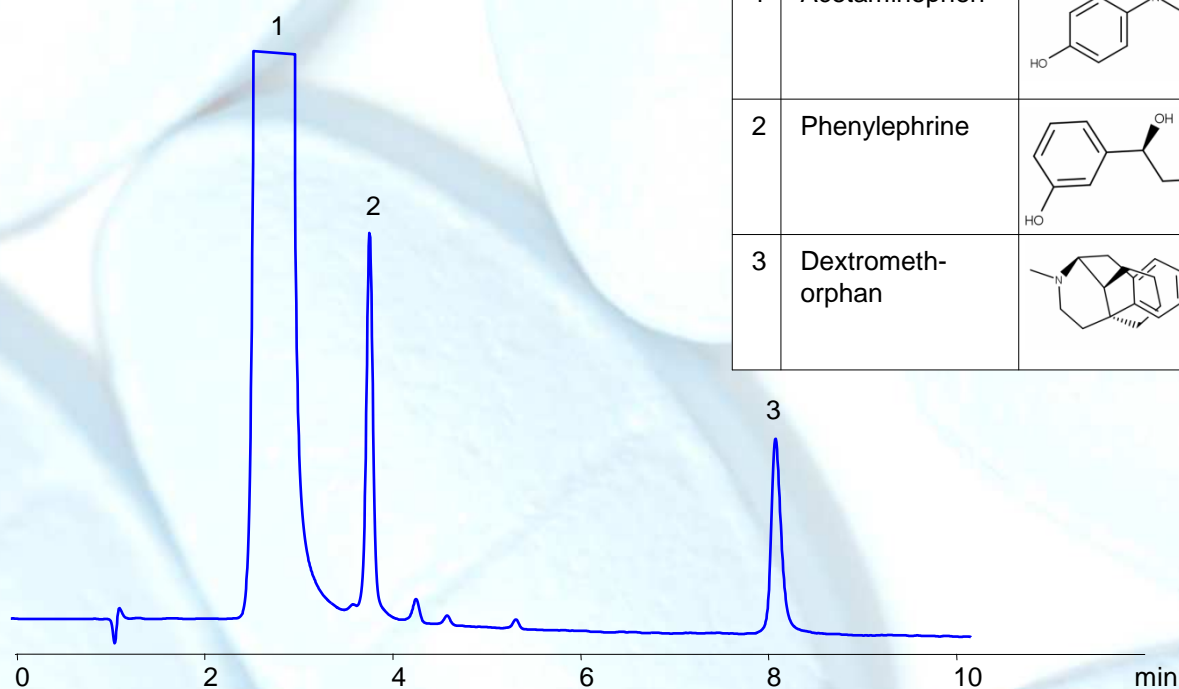
Active Ingredients	Amount (per caplet)
Acetaminophen	325 mg
Dextromethorphan HBr	10 mg
Phenylephrine HBr	5 mg

Inactive ingredients: anhydrous citric acid, carnauba wax, corn starch, flavors, hypromellose, magnesium stearate, microcrystalline cellulose, potassium serrate, powdered cellulose, pregelatinized starch, sodium benzoate, sodium citrate, sodium starch glycolate, sucralose

Column: Primesep 200
Size: 3.2 x 100 mm
Mobile phase: Gradient MeCN 5-50% in 5 min, 4 min hold
H3PO4 gradient 0.05% to 0.3% in 5 min, 4 min hold
Flow: 0.6 mL/min
Detection: UV 270 nm

Sample preparation:

- 1 caplet was crushed using a mortar and pestle
- Crushed caplet was mixed with 25 mL of 1:1 MeCN:water and stirred for 15 min
- Mixture was filtered using a 0.45 µm HPLC syringe filter



#	Compound	Structure
1	Acetaminophen	<chem>CC(=O)Nc1ccc(O)cc1</chem>
2	Phenylephrine	<chem>CNC[C@H](O)c1ccc(O)cc1</chem>
3	Dextromethorphan	<chem>CN1CC[C@H]2[C@@H]1Cc3ccc(OC)cc3[C@H]2</chem>

Analysis of Prescription and Over-the-Counter Drugs

Over-the-Counter Drugs

Children's Mucinex Multi-Symptom Cold Nighttime

4.0 fl oz

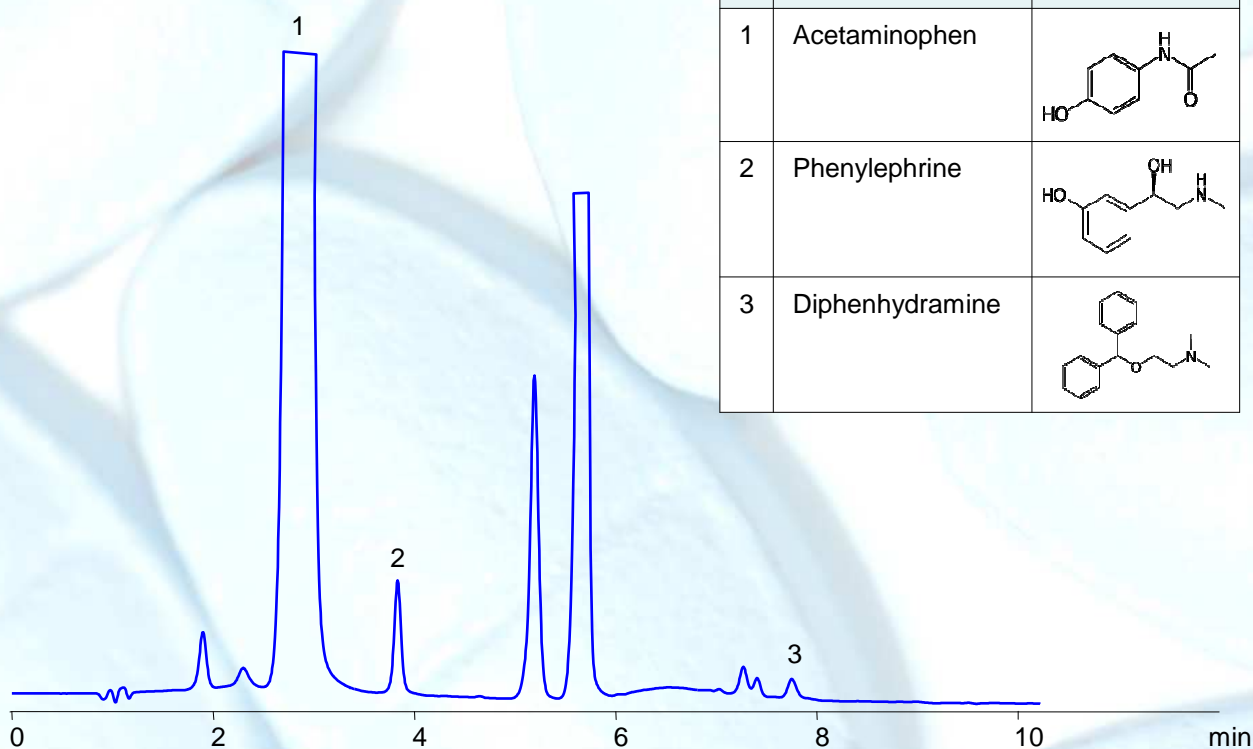
Active Ingredients	Amount (per softgel)
Acetaminophen	325 mg
Diphenhydramine HCl	12.5 mg
Phenylephrine HCl	5 mg

Inactive ingredients: anhydrous citric acid, edetate disodium, FD&C blue #1, FD&C red #40, flavors, glycerin, propylene glycol, propyl gallate, purified water, sodium benzoate, sorbitol, sucralose, trisodium citrate, dihydrate, xanthan gum

Column: Primesep 200
Size: 3.2 x 100 mm
Mobile phase: Gradient MeCN 5-50% in 5 min, 4 min hold
H3PO4 gradient 0.05% to 0.3% in 5 min, 4 min hold
Flow: 0.6 mL/min
Detection: UV 270 nm

Sample preparation:

- 1 mL was diluted 10-fold in 1:1 MeCN:water



Analysis of Drugs of Abuse

Separation of Cannabinols

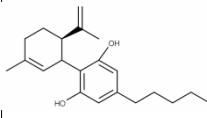
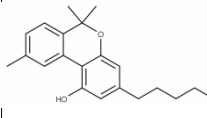
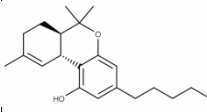
In 2013, 18 million Americans, roughly 5% of the population, reported using an illegal drug in the previous month. The most commonly used drugs included marijuana, cocaine, and amphetamines.

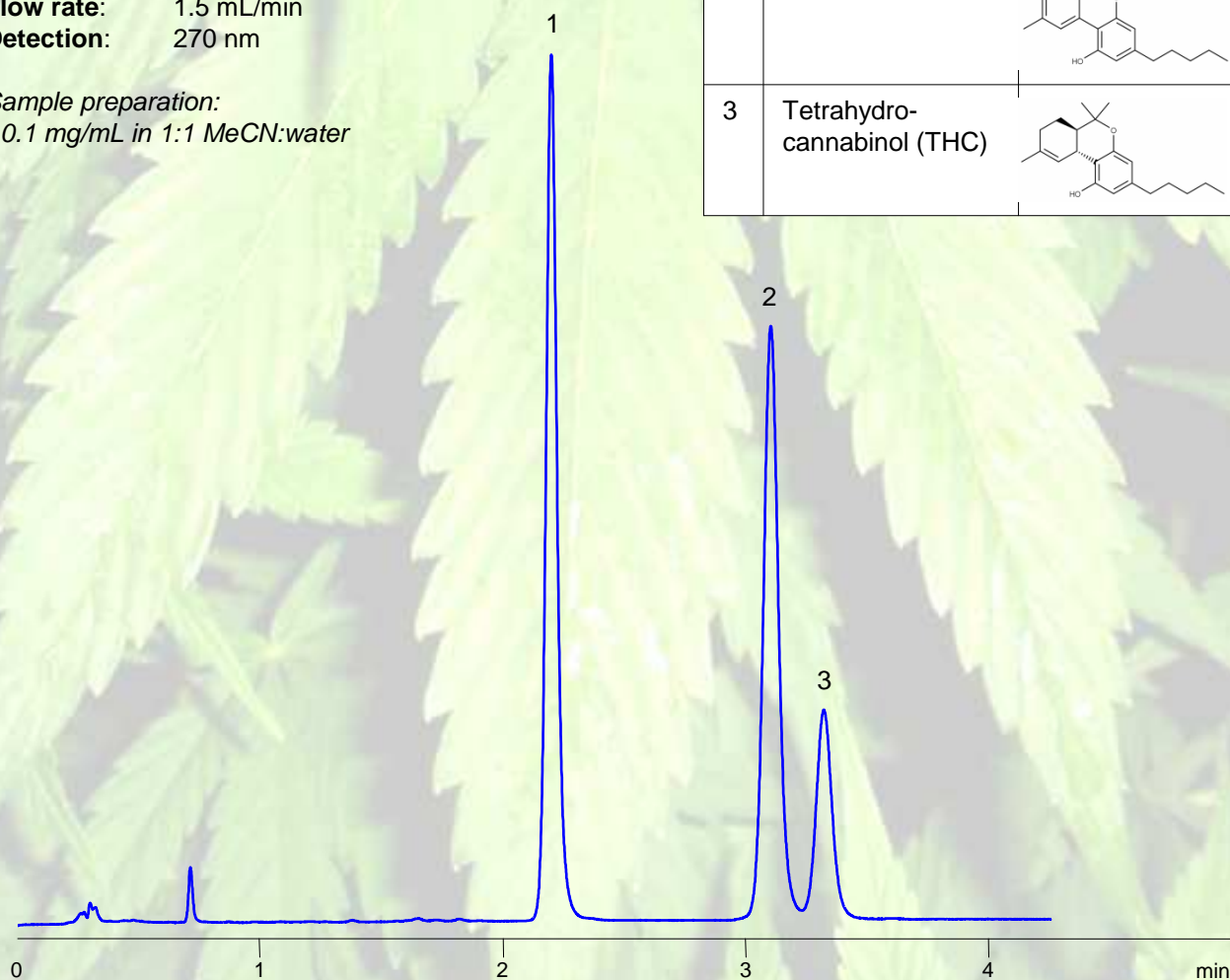
Marijuana is unique among these because its use is increasing. This is likely influenced by the recent legalization of marijuana in several states, which has created a demand for chromatographic methods to quantify levels of cannabinoids in now-legal marijuana products.

The following analysis includes marijuana and other commonly used illegal drugs.

Column: Coresep 100
Size: 3.2 x 100 mm (2.7 μ m, 90 A)
Mobile phase: MeCN 50% with 0.1% H₃PO₄
Flow rate: 1.5 mL/min
Detection: 270 nm

Sample preparation:
- 0.1 mg/mL in 1:1 MeCN:water

#	Compound	Structure
1	Cannabidiol	
2	Cannabinol	
3	Tetrahydrocannabinol (THC)	



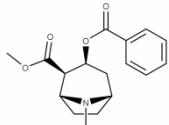
Analysis of Drugs of Abuse

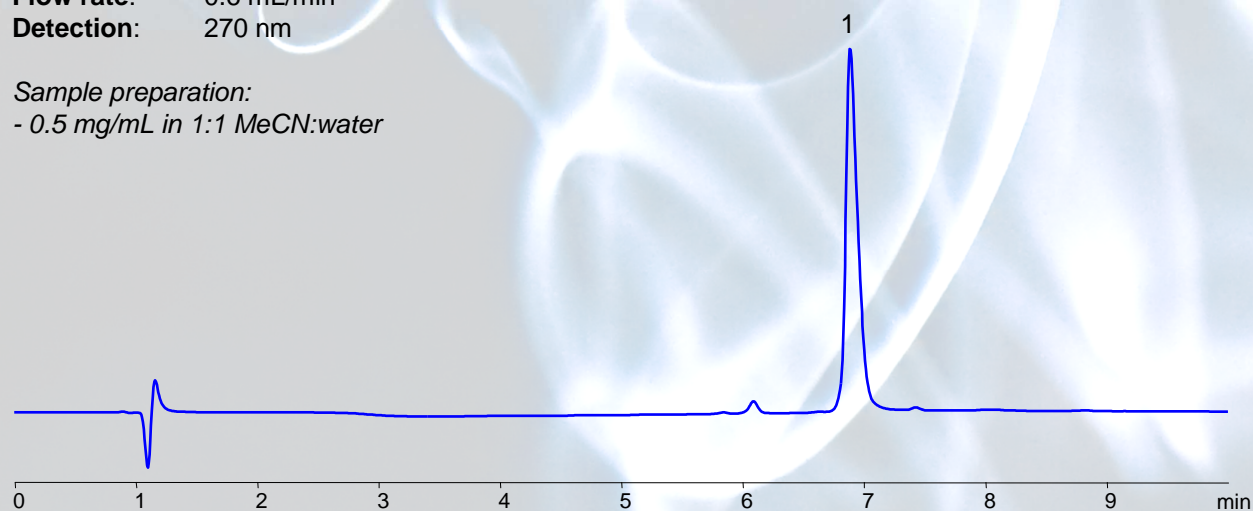
Cocaine and Amphetamine

Cocaine

Column: Primesep 200
Size: 3.2 x 100 mm
Mobile phase: MeCN 5-50% in 5 min, 4 min hold
H₃PO₄ 0.05% to 0.3% in 5 min, 4 min hold
Flow rate: 0.6 mL/min
Detection: 270 nm

Sample preparation:
- 0.5 mg/mL in 1:1 MeCN:water

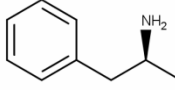
#	Compound	Structure
1	Cocaine	

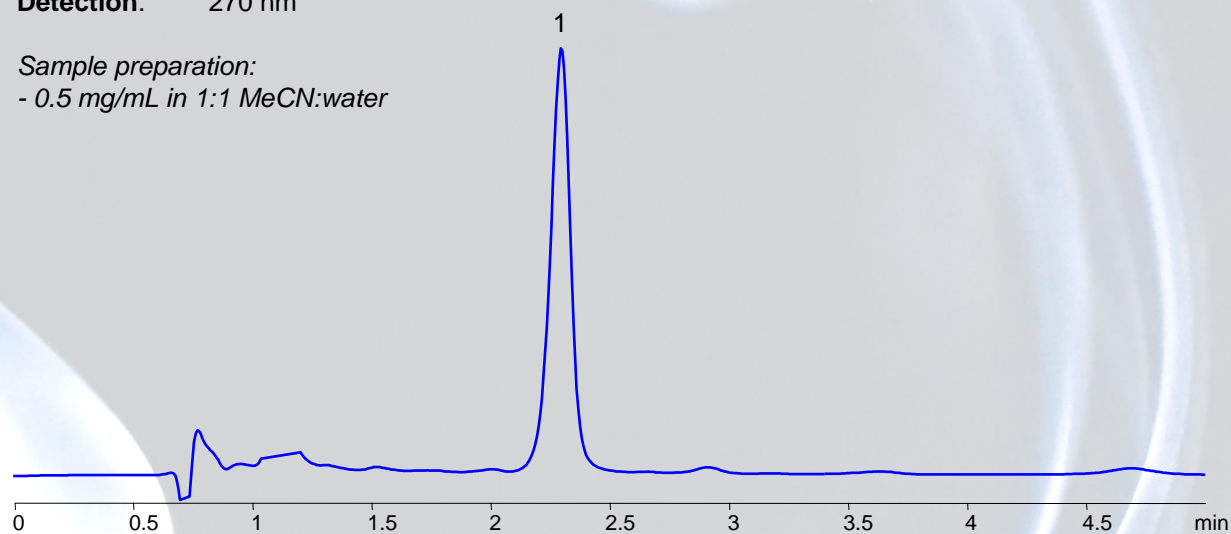


Amphetamine

Column: Primesep 200
Size: 3.2 x 100 mm
Mobile phase: MeCN 40% with 0.1% H₃PO₄
Flow rate: 0.6 mL/min
Detection: 270 nm

Sample preparation:
- 0.5 mg/mL in 1:1 MeCN:water

#	Compound	Structure
1	Amphetamine	



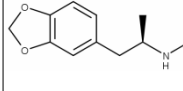
Analysis of Drugs of Abuse

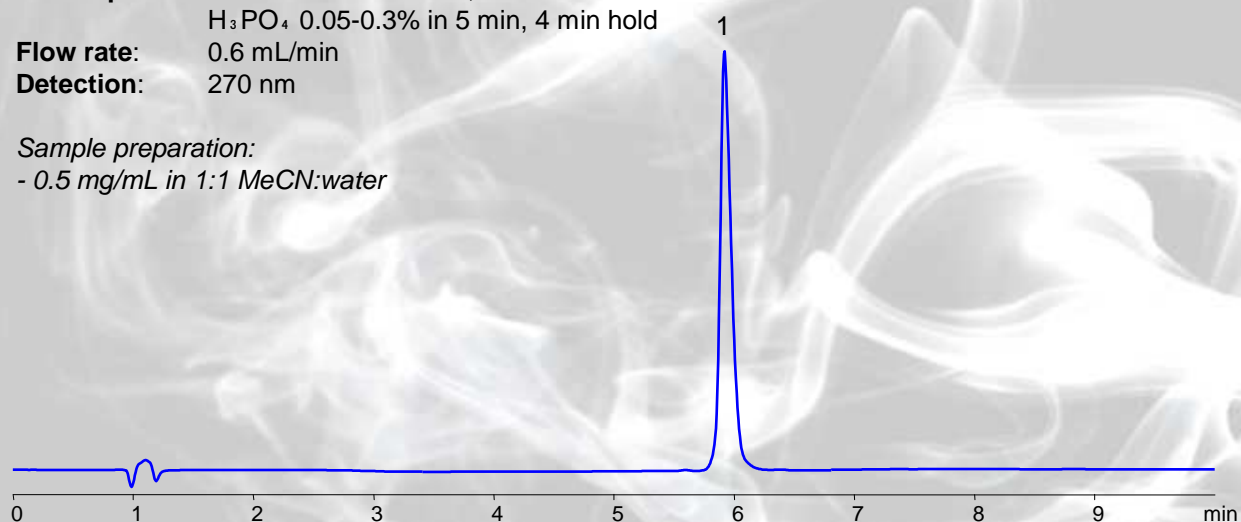
Amphetamines

3,4-Methylenedioxyamphetamine (MDMA)

Column: Primesep 200
Size: 3.2 x 100 mm
Mobile phase: MeCN 5-50% in 5 min, 4 min hold
H₃PO₄ 0.05-0.3% in 5 min, 4 min hold
Flow rate: 0.6 mL/min
Detection: 270 nm

Sample preparation:
- 0.5 mg/mL in 1:1 MeCN:water

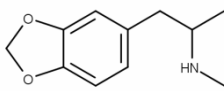
#	Compound	Structure
1	MDMA	

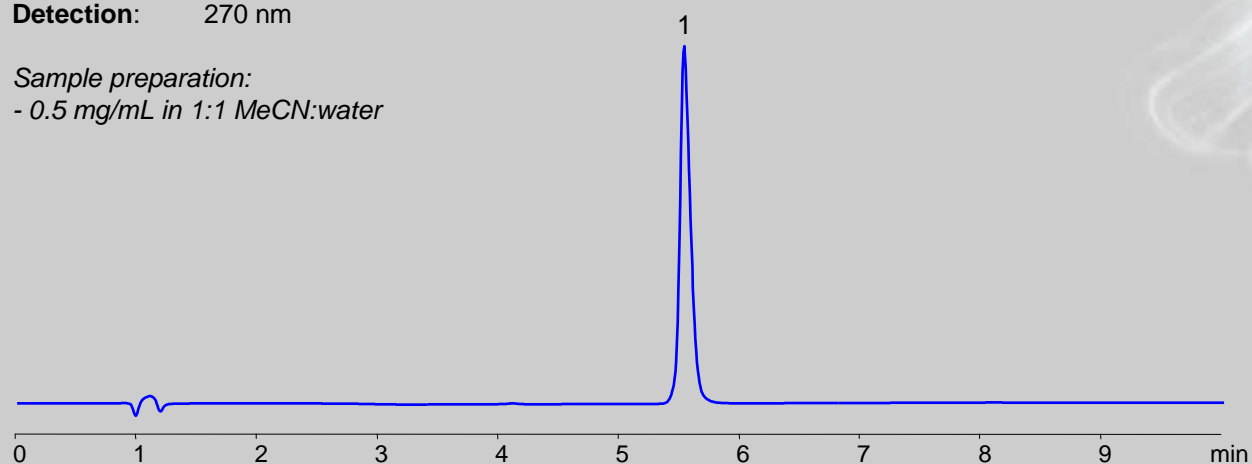


3,4-Methylenedioxyamphetamine (MDA)

Column: Primesep 200
Size: 3.2 x 100 mm
Mobile phase: MeCN 5-50% in 5 min, 4 min hold
H₃PO₄ 0.05% to 0.3% in 5 min, 4 min hold
Flow rate: 0.6 mL/min
Detection: 270 nm

Sample preparation:
- 0.5 mg/mL in 1:1 MeCN:water

#	Compound	Structure
1	MDA	





Contact Information

For direct contact, please call Monday through Friday from 9:00 am – 6:00 pm CST, USA.

Product Information

Call: 847 229-2629

Fax: 847 655-6079

Email: sales@sielc.com

Technical Support

Email: support@sielc.com

Accounts Payable

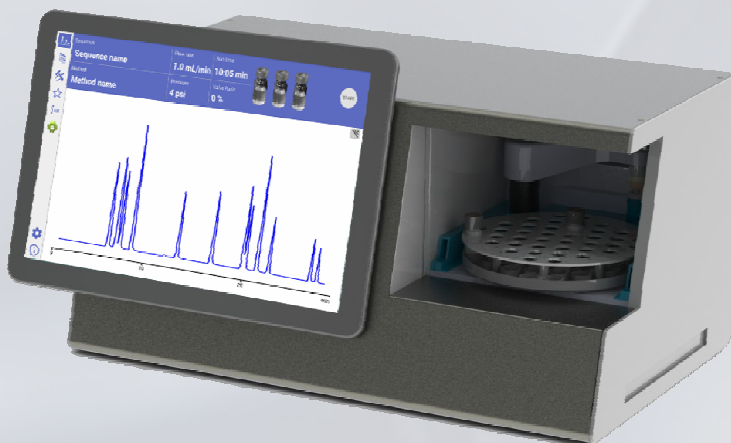
Email: finance@sielc.com

SIELC Technologies Address

SIELC Technologies

804 Seton Ct.

Wheeling, IL USA 60090



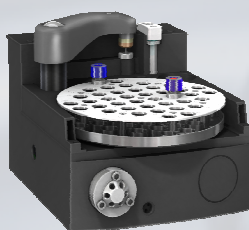
Alltesta Analyzer Small-Footprint Design

Full Line of Original Equipment Manufacturer (OEM) Products

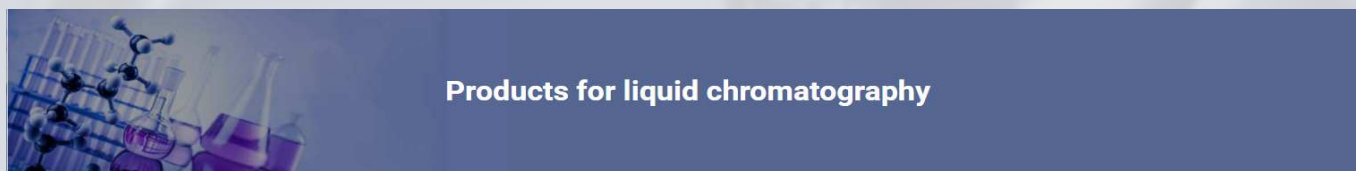
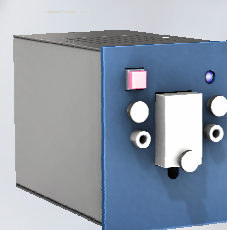
Pump



Autosampler



Detector



Products for liquid chromatography

Coresep™



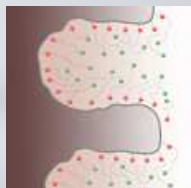
SHARC™



Primesep®



Obelisc™



Promix™



Legacy™

