HPLC Application

ID No.: **21960**

EPA 554: Carbonyl Compounds in Drinking Water

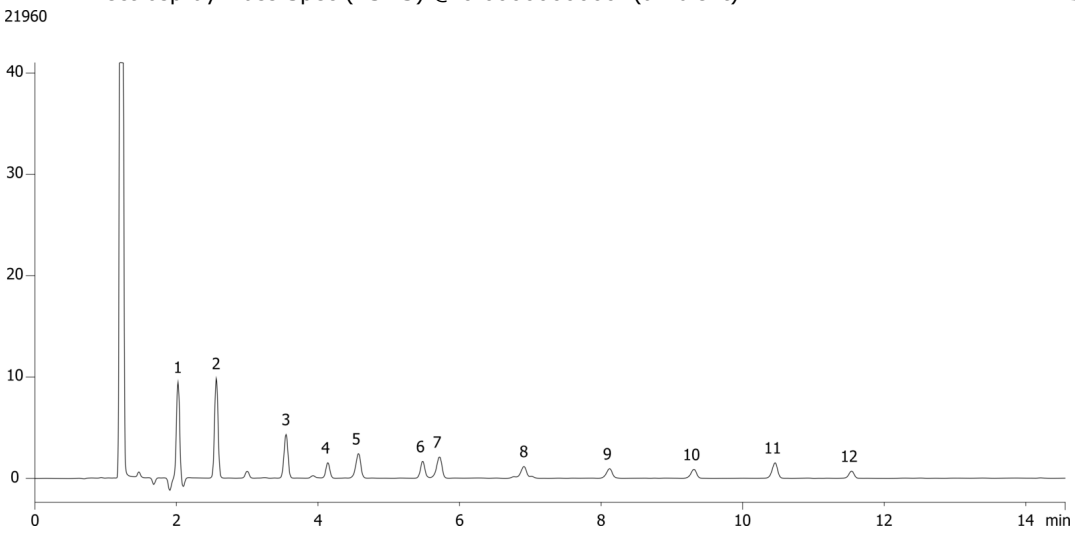
Column: Kinetex® 5µm C18 100 Å, LC Column 150 x 4.6 mm, Ea
Dimensions: 150 x 4.6 mm ID
Order No: 00F-4601-E0
Elution Type: Gradient
Eluent A: Water
Eluent B: Acetonitrile

Gradient Profile:	Step No.	Time (min)	Pct A	Pct B
	1	0	50	50
	2	15	0	100
	3	20	0	100

Flow Rate: 2 mL/min
Col. Temp.: 30 °C
Detection: Electrospray Mass Spec (ESMS) @ 0.0000000000 (ambient)

Products used in this application:

KINETEX®



For more information contact your Phenomenex Representative at support@phenomenex.com

Phenomenex products are available worldwide.

EPA 554: Carbonyl Compounds in Drinking Water

ANALYTES:

1 Formaldehyde
2 Acetaldehyde
3 Propanal
4 Crotonaldehyde
5 Butanal
6 Cyclohexanone
7 Pentanal
8 Hexanal
9 Heptanal
10 Octanal
11 Nonanal
12 Decanal

Sample Preparation Details

for **HPLC** Application ID No.: **21960**

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PRODUCT DESCRIPTION:

Strata® C18-E (55 µm, 70 Å), 500 mg / 6 mL, Tubes , 30/Pk

Order No.: 8B-S001-HCH

SOLID PHASE EXTRACTION (SPE) PRODCEDURE:

Note: The solvent volumes shown below are for a 500 mg bed mass.
The solvent volumes will need to be adjusted for a smaller or larger bed mass.

Condition:

Load:

Wash:

Dry:

Elute:

Final Prep and Analysis:

After elution Q.S. to 10 mL with ethanol before injection
Inject: 5 µL on HPLC Electrospray Mass Spec (ESMS) @ 0.0000000000 (ambient)

ANALYTES:	Spiked Conc. (ng/mL)	Log P	pKa	% Rec	%RSC (n=0)
1 Formaldehyde	250				
2 Acetaldehyde	250				
3 Propanal	250				
4 Crotonaldehyde	250				
5 Butanal	250				
6 Cyclohexanone	250				
7 Pentanal	250				
8 Hexanal	250				
9 Heptanal	250				
10 Octanal	250				
11 Nonanal	250				
12 Decanal	250				

Note: *This method is designed as a convenient starting point for further investigation and can be tailored to meet your extraction goals. Call your local Phenomenex Representative for assistance in method development and optimization techniques.*