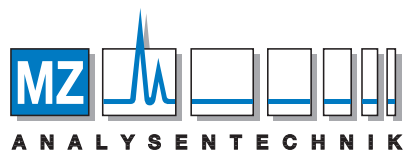


Analysis of Nine N-Nitrosamines Using Liquid Chromatography on Hypersil GOLD



AUTHORIZED DISTRIBUTOR

MZ-Analysentechnik GmbH, Barcelona-Allee 17 • D-55129 Mainz
Tel +49 6131 880 96-0, Fax +49 6131 880 96-20
e-mail: info@mz-at.de, www.mz-at.de

#	Compound Name	Compound Class	RT (min)
1	N-nitrosodimethylamine-d6 (/Search?CompoundName=N-nitrosodimethylamine-d6)	Nitrosamine	0.80
2	N-nitrosodimethylamine (/Search?CompoundName=N-nitrosodimethylamine)	Nitrosamine	0.81
3	N-nitrosomorpholine (/Search?CompoundName=N-nitrosomorpholine)	Nitrosamine	1.12
4	N-nitrosomethylethylamine (/Search?CompoundName=N-nitrosomethylethylamine)	Nitrosamine	1.59
5	N-nitrosopyrrolidine (/Search?CompoundName=N-nitrosopyrrolidine)	Nitrosamine	1.68
6	N-nitrosodiethylamine (/Search?CompoundName=N-nitrosodiethylamine)	Nitrosamine	3.34
7	N-nitrosopiperidine (/Search?CompoundName=N-nitrosopiperidine)	Nitrosamine	3.47
8	N-nitrosodi-n-propylamine-d14 (/Search?CompoundName=N-nitrosodi-n-propylamine-d14)	Nitrosamine	3.85
9	N-nitrosodi-n-propylamine (/Search?CompoundName=N-nitrosodi-n-propylamine)	Nitrosamine	3.86
10	N-nitrosodi-n-butylamine (/Search?CompoundName=N-nitrosodi-n-butylamine)	Nitrosamine	4.18
11	N-nitrosodi-n-phenylamine (/Search?CompoundName=N-nitrosodi-n-phenylamine)	Nitrosamine	4.21

Instrument

Instrument type	LCMS
LC System	UltiMate 3000 RSLC system
MS System	Q Exactive hybrid quadrupole-Orbitrap MS
Plug-in Software	DCMSLink Software
Data Processing	Xcalibur Software

Columns

Manufacturer	Thermo Fisher Scientific
Brand	Thermo Scientific
Model	Hypersil GOLD
Diameter	2.1 mm
Length	100 mm
Particle Size	1.9 µm
Stationary Phase	C18 Selectivity
Catalog #	25002-102130

Method Parameters

Run Time Length	6 min
LC Condition: Injection volume	100 µL
LC Condition: Flow rate	500 µL/min
LC Condition: Run time	6.0 min
LC Condition: Pump Eluent A	water + 0.1% formic acid
LC Condition: Pump Eluent B	methanol + 0.1% formic acid
MS Condition: Scan type	Full scan MS
MS Condition: Resolving power	70,000
MS Condition: AGC	100,000
MS Condition: Maximum IT	100 ms
MS Condition: Scan range	5500 V
MS Condition: Spray voltage	m/z 50 to 500
MS Condition: Capillary temperature	350 °C
MS Condition: Heater temperature	100 °C
MS Condition: Sheath gas	75 arb
MS Condition: Aux gas	25 arb
MS Condition: Ion Sweep gas flow rate	2 arb
MS Condition: S-Lens RF level	55%
MS Condition: Detection mode	Positive
MS Condition: Lock masses	Off