

CoreFocus
Report
No.403

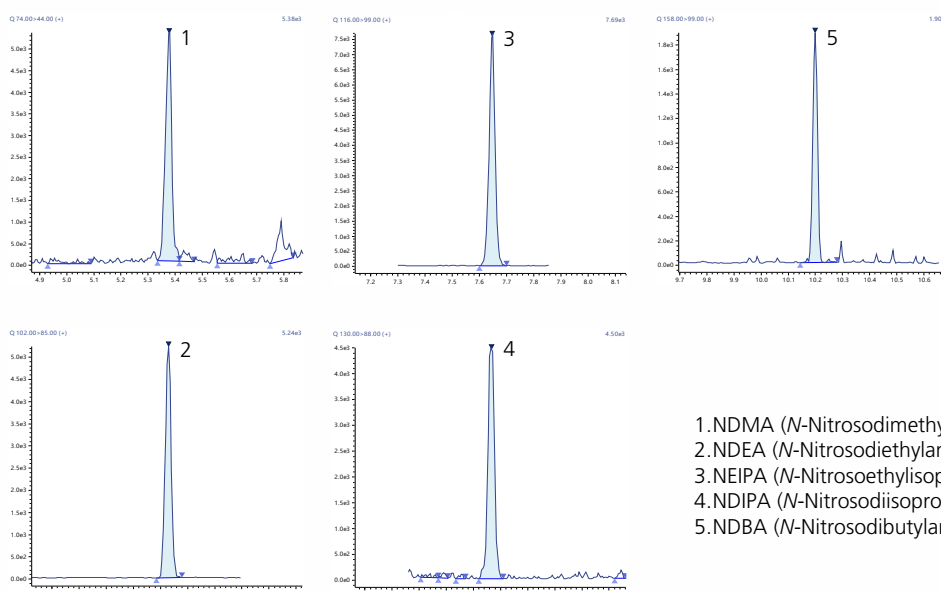
GCMS

SH Series

SH-I-624Sil MS

High Sensitive and Accurate Analysis of Nitrosamines

Keywords: carcinogenic components



1. NDMA (*N*-Nitrosodimethylamine)
2. NDEA (*N*-Nitrosodiethylamine)
3. NEIPA (*N*-Nitrosoethylisopropylamine)
4. NDIPA (*N*-Nitrosodiisopropylamine)
5. NDBA (*N*-Nitrosodibutylamine)

Instrument Used

GCMS : GCMS-TQ™ 8050 NX
Autosampler : AOC-20i+s Plus
Column : SH-I-624Sil MS (30 m x 0.25 mm I.D., 1.4 μm)
P/N : 221-75962-30
Insert liner : Splitless deactivated liner w/low wool

GC Conditions

Injection unit temp. : 250 °C
Injection volume : 2 μL
Injection mode : Splitless
(High pressure injection for 1.5 min at 250 kPa)
Carrier gas control : Linear speed (39.7 cm/s)
Column oven temp. : 50 °C (1 min) - (20 °C /min) - 250 °C (3min)

MS Conditions

Interface temp. : 250 °C
Ion source temp. : 230 °C
Ionization method : EI
Measurement mode : MRM
Measurement m/z : NDMA 74>44 CE = 6, 74>42 CE = 18
NDEA 102>85 CE = 6, 102>56 CE = 16
NEIPA 116>99 CE = 6, 116>70 CE = 14
NDIPA 130>88 CE = 6, 130>42 CE = 12
NDBA 158>99 CE = 10, 158>141 CE = 4
Event time : 0.3 s
Resolution : Unit - unit (Q1 - Q3)

Source : Application News 01-00242 ([JP](#), [ENG](#))

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