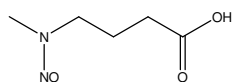


## ニトロソアミン類

## N-Nitrosoamines

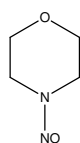
11 種類のニトロソアミン類を CAPCELL PAK C<sub>18</sub> AQ S3 (2.0 mm i.d. x 100 mm) を用いて分析した例を示します。



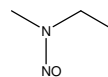
1. *N*-ニトロソメチルアミノ酪酸 (10 µg/mL)  
*N*-Nitrosomethylaminobutyric acid (NMBA) (M.W. 146.1)



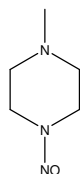
2. *N*-ニトロソジメチルアミン (10 µg/mL)  
*N*-Nitrosodimethylamine (NDMA) (M.W.74.1)



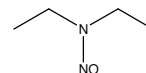
3. *N*-ニトロソモルフォリン (10 µg/mL)  
*N*-Nitrosomorpholine (NMOR) (M.W. 116.1)



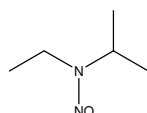
4. *N*-ニトロソメチルエチルアミン (10 µg/mL)  
*N*-Nitrosomethylethylamine (NMEA) (M.W. 88.1)



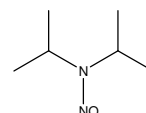
5. *N*-ニトロソ-*N'*-メチルピペラジン (10 µg/mL)  
*N*-Nitroso-*N'*-methylpiperazine (MeNP) (M.W. 129.2)



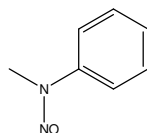
6. *N*-ニトロソジエチルアミン (10 µg/mL)  
*N*-Nitrosodiethylamine (NDEA) (M.W. 102.1)



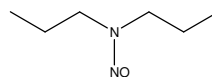
7. *N*-ニトロソエチルイソプロピルアミン (10 µg/mL)  
*N*-Nitrosoethylisopropylamine (NEIPA) (M.W. 116.2)



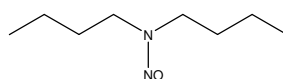
8. *N*-ニトロソジイソプロピルアミン (10 µg/mL)  
*N*-Nitrosodiisopropylamine (NDIPA) (M.W. 130.2)



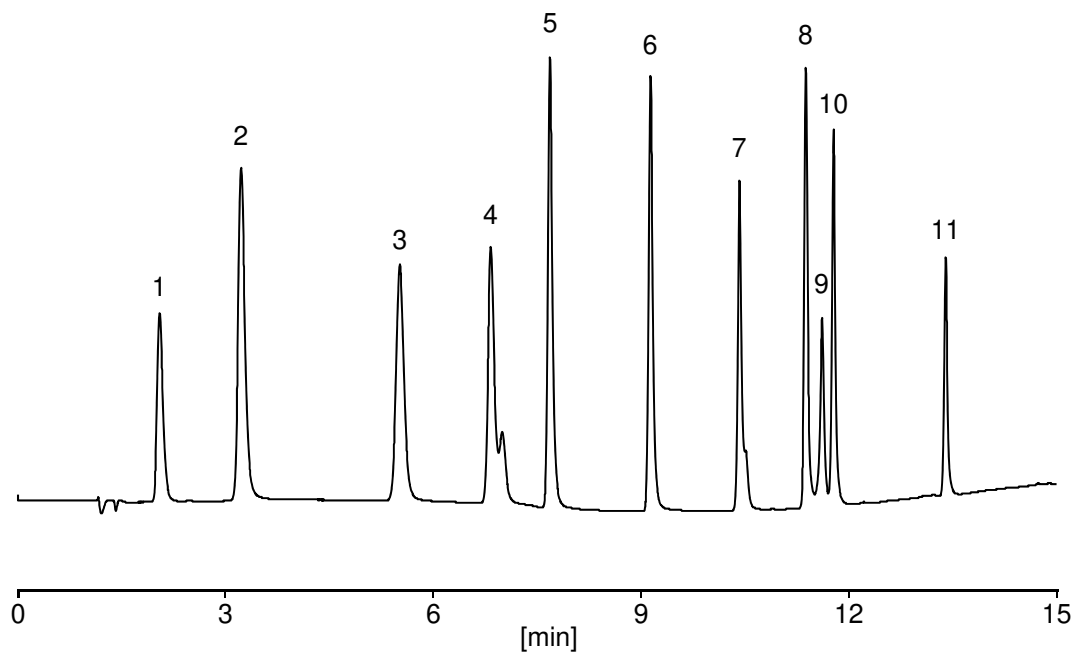
9. *N*-ニトロソメチルフェニルアミン (10 µg/mL)  
*N*-Nitrosomethylphenylamine (NMPA) (M.W.136.2)



10. *N*-ニトロソジ-*n*-プロピルアミン (10 µg/mL)  
*N*-Nitrosodi-*n*-propylamine (NDPA) (M.W. 130.2)



11. *N*-ニトロソジ-*n*-ブチルアミン (10 µg/mL)  
*N*-Nitrosodi-*n*-butylamine (NDBA) (M.W.158.24)



**【HPLC Conditions】**

Column : CAPCELL PAK C<sub>18</sub> AQ S3 ; 2.0 mm i.d. x 100 mm

Mobile phase : A) 50 mmol/L CH<sub>3</sub>COONH<sub>4</sub>  
 B) CH<sub>3</sub>OH  
 B 0 % (0 min) -> 90 % (10 min) -> 90 % (15 min) ->  
 0 % (15.1 min) Gradient

Flow rate : 200 μL/min

Temperature : 40 °C

Detection : UV 240 nm

Inj. vol. : 5 μL

Sample dissolved in : Each compounds were dissolved in 0.1 vol% formic acid, water / methanol = 1/1 (v/v) at 1 mg/mL. All solutions were mixed together in same ratio. The mixture was diluted with water at 10 μg/mL each.

※ 1 μg/mL = 1 ppm