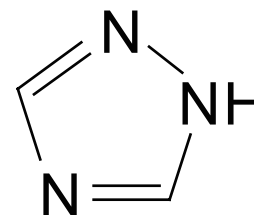


Melamine - COSMOSIL HILIC

Melamine analysis by HPLC and LC/MS/MS using COSMOSIL HILIC

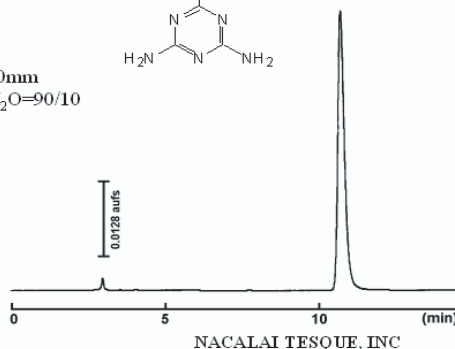
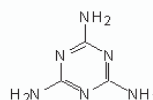
| | HILIC |
|-----------------------|---|
| Silica Gel | High Purity Porous Spherical Silica |
| Average Particle Size | 5 µm |
| Average Pore Size | approx. 120 Å |
| Specific Surface Area | approx. 300 m ² /g |
| Stationary Phase | Triazole |
| Main Interaction | Hydrophilic Interaction Anion-exchange |



■ HPLC

COSMOSIL Chromatogram Index

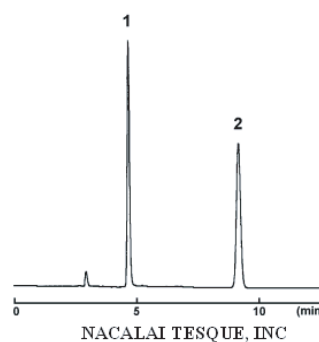
Sample: Melamine
 CAS No.: [108-78-1]
 Molecular formula: C₃H₃N₃
 Column: HILIC
 Column size: 4.6mm I.D. -250mm
 Mobile phase: Acetonitrile/ H₂O=90/10
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV240 nm
 Attenuation: 0.128 au/fs
 Sample conc.: 1.0mg/ml
 Injection volume: 1.0µl
 Retention time: 10.79min
 Capacity factor: 2.79



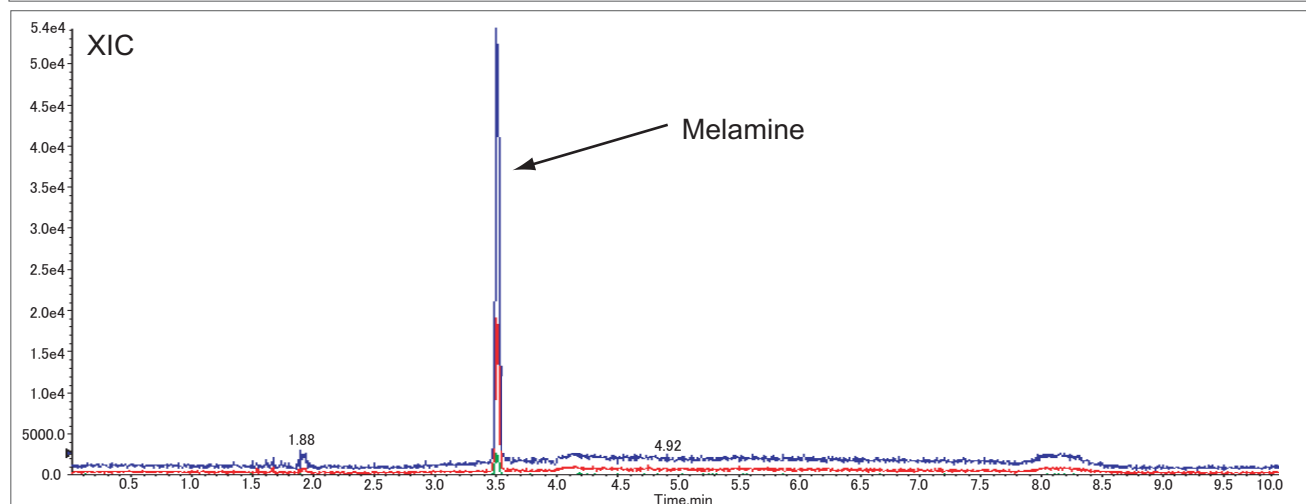
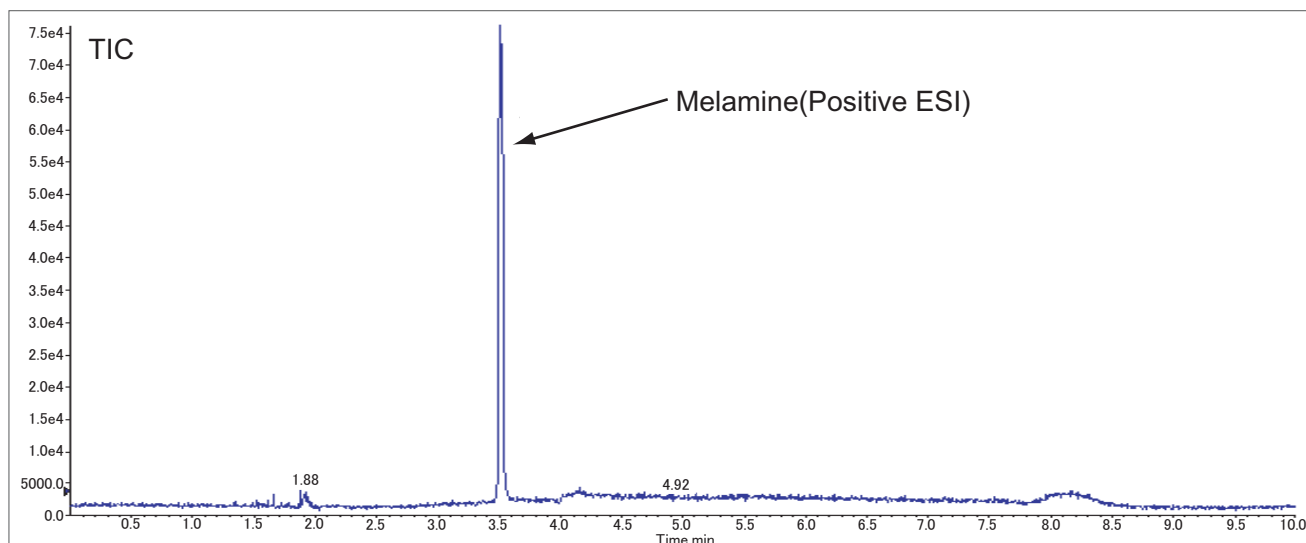
COSMOSIL Application Data

Column: HILIC
 Column size: 4.6mm I.D. -250mm
 Mobile phase: Acetonitrile/ 10mmol/l
 Ammonium Acetate = 70/30
 Flow rate: 1.0 ml/min
 Temperature: 30°C
 Detection: UV225nm

Sample: 1; Melamine (0.1 µg)
 2; Cyanuric Acid (1.0 µg)



■ LC-MS/MS



Column COSMOSIL HILIC
 Column Size 2.0 mm I.D.x 150mm
 Mobile Phase A: Acetonitrile + 10 mmol/l Ammonium acetate
 B: Water + 10 mmol/l Ammonium acetate

Temperature 40°C
 Detection MRM (ESI-POS)

| Q1 | Q2 |
|-----|----|
| 127 | 85 |
| 127 | 68 |
| 127 | 60 |

Gradient

| Time (min) | Flow rate (µl/min) | A (%) | B (%) |
|------------|--------------------|-------|-------|
| int | 250 | 97 | 3 |
| 5 | 250 | 20 | 80 |
| 5.5 | 250 | 3 | 97 |
| 5.6 | 250 | 97 | 3 |
| 10 | 250 | 97 | 3 |

Sample Volume Melamine
 (10 ppb / 10 µl / inj)

LC/MS/MS data is provided by customer.

For research use only, not intended for diagnostic or drug use.



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