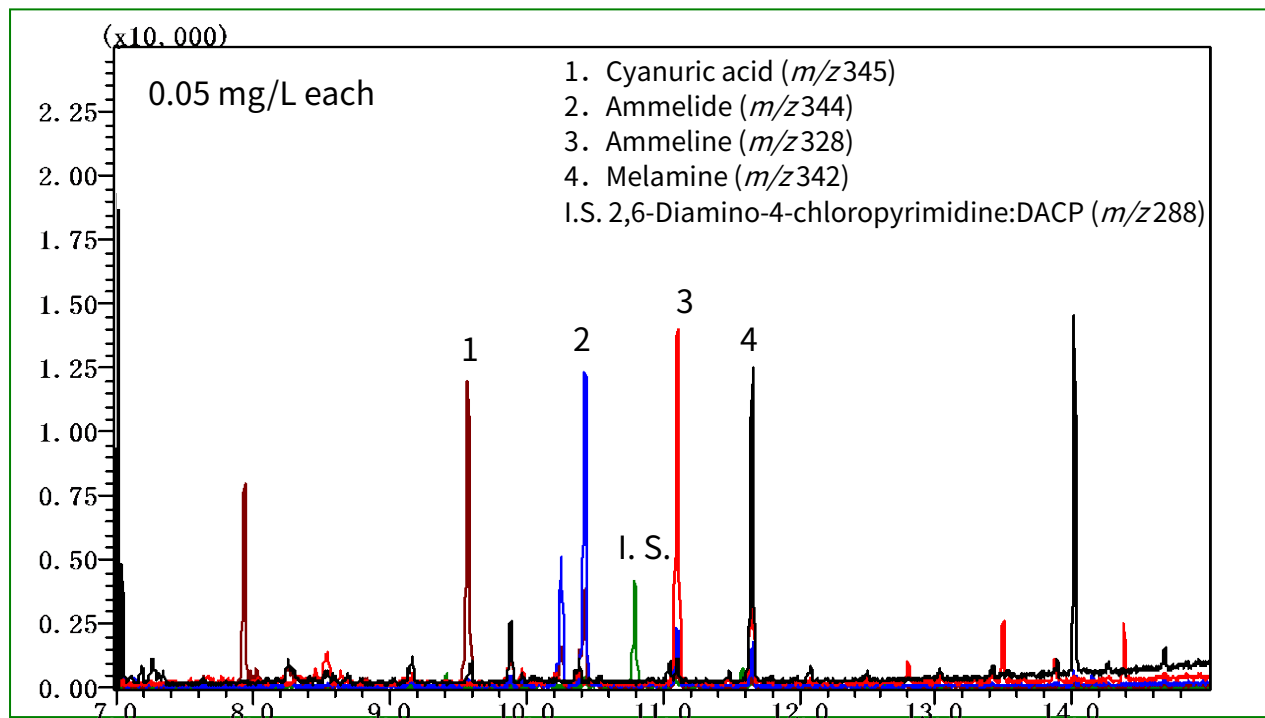


The following are some examples of melamine analysis. Melamine and related substances, cyanuric acid, ammeline, and ammelide were measured using GC/MS. Derivatization is required to measure these compounds. Silylation, a common derivatization method, was made prior to measurement.

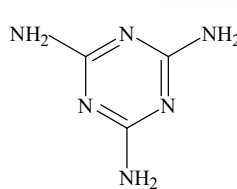
Example: Measurement of standards



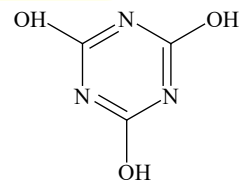
GC Condition

System	:GC - MS
Column	: InertCap 5MS/Sil 0.25 mm I.D. x 30 m df = 0.25 μ m
Column Temp.	: 75 °C (1 min) - 15 °C/min - 285 °C
Carrier Gas	: He 35 cm/sec
Injection	: Splitless 1min 1 μ L 280 °C
Detection	: MS/SIM mode. 290 °C
Derivatization Reagent	: BSTFA+TMCS (99+1)

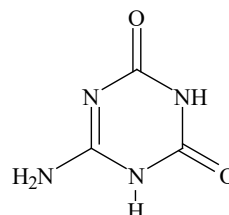
Structural Formula



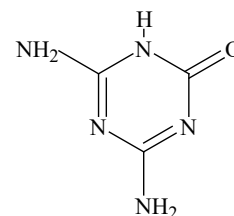
Melamine



Cyanuric acid

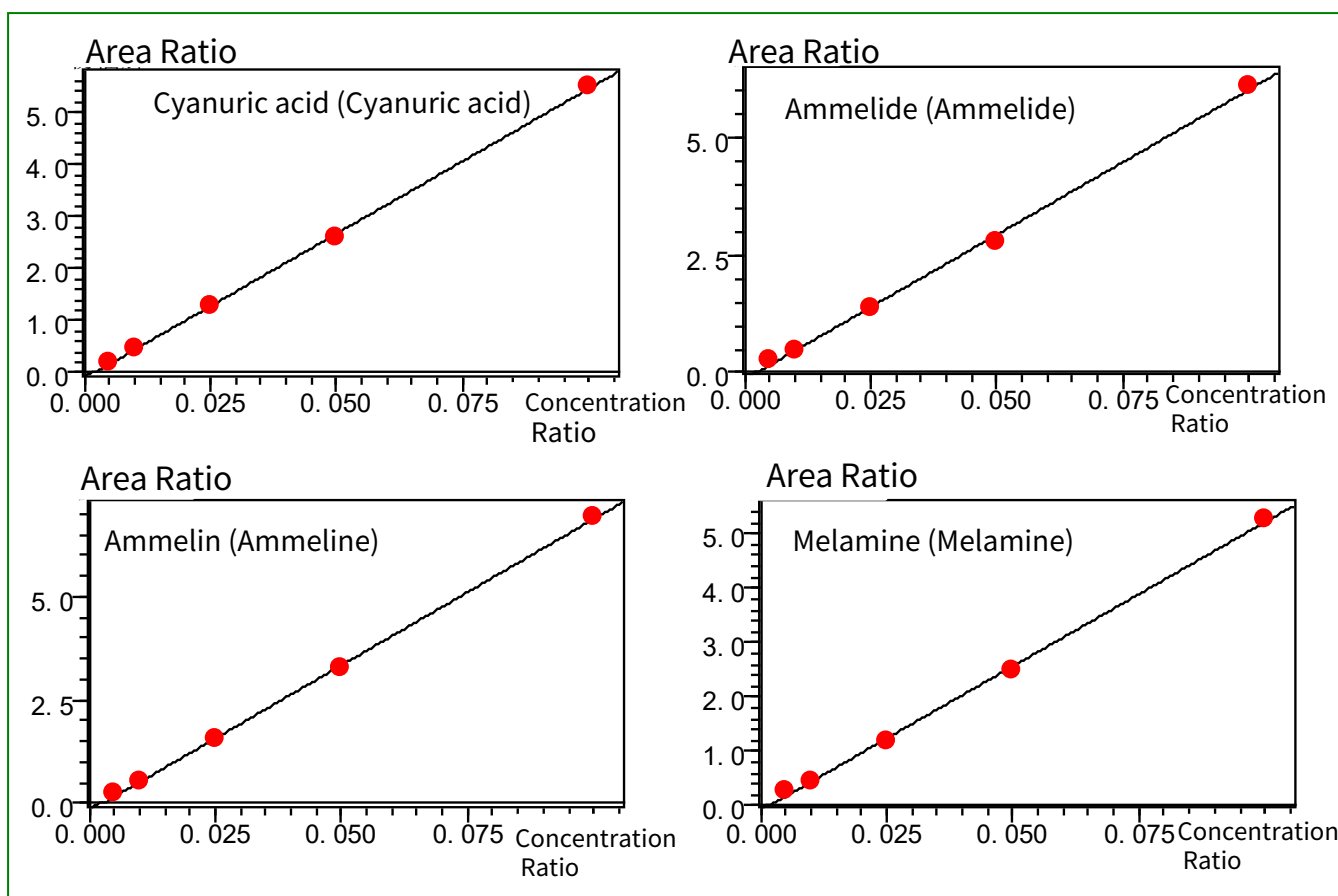


Ammelide



Ammeline

Calibration curves



The concentration range of the calibration curves was between 0.005 mg/L and 0.1 mg/L. Calibration curves were prepared using an internal standard method with 2,6-diamino-4-chloropyrimidine (DACP) as the internal standard. All components show good linearity.

InertCap 5MS/Sil

I.D. (mm)	Length (m)	df (μm)	Max. Operating Temp. ($^{\circ}\text{C}$)	Cat.No.
0.25	30	0.25	iso-325-Prog.350	1010-15142

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