Monomethylamine in water

Application Note

Environmental

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Introduction
For the analysis of polar impurities in amine streams a highly inert and stable column is required. The Agilent CP-Volamine shows excellent elution of water and monomethylamine (MMA). In this method the MMA was measured to be 40.8%. This component was also determined via a titration method and resulted in 41.2%. The GC method matched very well.
**Conditions**

- **Technique**: GC-capillary
- **Column**: Agilent CP-Volamine, 0.32 mm x 60 m fused silica (df = optimized) (Part no. CP7448)
- **Temperature**: 40 °C, 10 min → 250 °C, 20 °C/min
- **Carrier Gas**: Helium, approx. 68 kPa
- **Injector**: Split 1:50
- **Detector**: TCD
- **Sample Size**: 0.6 μL
- **Concentration Range**: % range

**Peak identification**

1. water 58.7%
2. MMA monomethylamine 40.8%
3. methanol 0.3%