

VA Application Note No. V-80

Title: Germanium in lead

Summary: Germanium can be determined by adsorptive stripping voltammetry (AdSV) at the HMDE using acetate buffer as supporting electrolyte and catechol as complexing agent.

Sample: Metallic lead

Sample preparation: The metal is dissolved in nitric acid

Germanium:

Electrolyte: Catechol + acetate buffer

AE: Pt

RE: Ag/AgCl/KCl (3mol/L)

Parameters: DPAdSV at HMDE

Deposition: -500 mV (30 s)

Determination: -500 mV to -900 mV

Peak potential Ge: -700 mV

Results:

Ge

62 mg/kg

Determination of germanium

