

# VA Application Note No. V- 60

**Title:** Cysteine and cystine in caseinate

**Summary:** Determination of cysteine and cystine in caseinate after sample preparation with NaOH.

**Sample:** Na caseinate sample containing cysteine and cystine  
**Sample Preparation:** Dissolve in NaOH and dilute with high purity water

**Cysteine and Cystine:**  
**Electrolyte:** NH<sub>4</sub>Cl buffer and CH<sub>3</sub>COOH, pH = 10  
**AE:** Pt  
**RE:** Ag/AgCl/KCl 3M  
**Parameters:** DPPOL (-50 mV), DME  
 U<sub>start</sub> = -1300 mV, U<sub>end</sub> = -1850 mV for cystine  
 U<sub>start</sub> = -250 mV, U<sub>end</sub> = -750 mV for cysteine  
 Ep (cysteine) = - 470 mV, Ep (cystine) = - 1650 mV

Results:	Cysteine mg/g	Cystine µg/g
	13.2	27.7

Determination of cysteine Determination of cystine

