

35.1.18

AOAC Official Method 937.09 Salt (Chlorine as Sodium Chloride) in Seafood

Volumetric Method

First Action 1937

Final Action

A. Reagents

(a) *Silver nitrate standard solution*.—0.1M. Prepare as in **941.18A** (see A.1.11) and standardize against 0.1M NaCl containing 5.844 g of pure dry NaCl/L.

(b) *Ammonium thiocyanate standard solution*.—0.1M. Prepare as in **941.18D(b)** (see A.1.11) and standardize against 0.1M AgNO₃.

(c) *Ferric indicator*.—Saturated solution of FeNH₄(SO₄)₂·12H₂O.

B. Determination

(a) *Shellfish meats*.—Weigh 10 g meats, liquid, or mixed meats and liquid, into 250 mL Erlenmeyer or beaker.

(b) *Other fish products*.—Use suitable size test sample, depending on NaCl content.

Add known volume 0.1M AgNO₃ solution, more than enough to precipitate all Cl as AgCl, and then add 20 mL HNO₃. Boil gently on hot plate or sand bath until all solids except AgCl dissolve (usually 15 min). Cool, add 50 mL H₂O and 5 mL indicator, and titrate with 0.1N NH₄SCN solution until solution becomes permanent light brown. Subtract mL 0.1M H₄SCN used from mL 0.1M AgNO₃ added and calculate difference as NaCl. With 10 g test sample each mL 0.1N AgNO₃ = 0.058% NaCl.

References: *JAOC* **20**, 410(1937); **23**, 589(1940).

CAS-7647-14-5 (sodium chloride)