

## SUPPLEMENTARY INFORMATION FOR "REAGENT CHEMICALS", 5TH EDITION

The Committee on Analytical Reagents wishes to announce several changes in requirements and tests for the 5th Edition of *Reagent Chemicals*.

**Barium Carbonate**

On page 116 raise the limit for the requirement for *Strontium (Sr)* from "0.3%" to "0.7%".

**Bromocresol Green**

On page 137 in the procedure for *Visual transition interval*, line 9, change "1.3 mL" to "2.0 mL". Also see the announcement in *Anal. Chem.*, **48**, 1432 (1976).

**Morpholine**

On page 412 for the requirement for *Color (APHA)* change "Not more than 10" to "Not more than 15". On page 413 for the test for *Color (APHA)* on line 1, change "2.0 mL" to "3.0 mL" and on line 3 change "APHA No. 10" to "APHA No. 15".

**Potassium Nitrate**

On page 495 change the title for the requirement and test for "Chlorine, total (as Cl)" to "Chloride (Cl)". For the procedure delete the first sentence, and change the second sentence to "Dissolve 1.0 g in about 20 mL...."

**Sodium Molybdate**

On page 580 change the upper limit for the requirement for *pH* of a 5% solution from "10.0" to "10.5".

**Sodium Nitrate**

On page 582 change the title for the requirement and test for "Chlorine, total (as Cl)" to "Chloride (Cl)". For the procedure delete the first sentence, and change the second sentence to "Dissolve 1.0 g in about 20 mL...."

**Sodium Phosphate, Dibasic, Anhydrous**

On page 593-594 change the requirement and test for "pH of a 0.1 M solution" to "pH of a 5% solution" having the limits "From 8.7 to 9.3 at 25°C".

**Sodium Thiocyanate**

On page 611 raise the requirement for *Chloride (Cl)* from "0.005%" to "0.01%".

## CORRECTIONS

**Interferometric Concentration Determination of Dextran after Gel Chromatography**

In this article by Lars Hagel, *Anal. Chem.*, **50**, 569 (1978), due to some unfortunate approximations, the relative error caused by optical activity of the sample as expressed by Equation 15 (p 571) is too small. The following estimations yields a correct order of the relative error.

$$a \leq \frac{1}{4} A_0 \alpha_r \quad (11)$$

$$b \leq \frac{1}{4} A_0 (\alpha_r + 2) \quad (12)$$

$$\frac{a^2}{b^2} \cot(\beta + \Delta\varphi/2) \leq \frac{1}{4} \alpha_r^2 \quad (13)$$

This yields

$$A_{p,\alpha} \simeq 2b \sin(\beta + \Delta\varphi/2) \leq \frac{1}{2} A_0 (2 + \alpha_r) \sin(\beta + \Delta\varphi/2) \quad (14)$$

and

$$f_{\text{rel}} \simeq \frac{\alpha_r}{1 - \left( \frac{\sin \beta}{\sin(\beta + \Delta\varphi/2)} \right)^2} < 5 \times 10^{-5} \quad (15)$$

As stated earlier, this relative error is negligible.

**Flow Photometric Monitor for Uranium in Carbonate Solutions**

In this article by B. B. Jablonski and D. E. Leyden, *Anal. Chem.*, **50**, 404 (1978), the operating wavelength of 420 nm should be added to the Experimental section.