

KF Application Note No. K- 30

Title: Water in bismuth subnitrate (BiONO₃)

Summary: The water content of bismuth subnitrate is determined according to Karl Fischer.

Sample: Bismuth subnitrate (BiONO₃)

Sample

Preparation: Weigh ca. 5 g sample into a dry septum flask. Add 50 mL dry methanol (also weighed) and a stirring bar and stopper the flask. Stir for 1 h, then let the mixture settle for 5 min.

Instruments and

Accessories: 701 KF Titrino, 720 KFS Titrino or 758 KFD Titrino, 703 Titration Stand, printer

Analysis: Pour ca. 20 mL methanol into the titration vessel and condition it. Then inject ca. 3 mL sample extract (without any undissolved BiONO₃) using a syringe and start the automatic determination. The exact sample mass is determined by difference weighing.

Reagents:

Solvent: methanol (dry)

Titrant: Hydranal Composite 5 (Riedel-de Haën)

Results: AVG(3) = 1.65 +/- 0.006 % water

Settings: 701 KF Titrino

>titration parameters

extr.time 20 s

stop crit.: drift

stop drift 20 uL/min

>preselections

conditioning: on

req.smpl size: on

report: full