

KF Application Note No. K- 36

Title: Water in vinyl chloride (chloroethylene)

Summary: The water content of vinyl chloride is determined according to Karl Fischer.

Sample: Vinyl chloride (chloroethylene)

Sample Preparation: none

Instruments and Accessories: 701 KF Titrino, 720 KFS Titrino or 758 KFD Titrino or 737 KF Coulometer (cell with diaphragm), 703 Titration Stand, printer

Analysis: Transfer the liquefied sample directly from the sample flask («gas mouse») containing the compressed vinyl chloride into the conditioned titration vessel or coulometric measuring cell. Use a sample mass of ca. 20 g for the volumetric determination and ca. 5 g for the coulometric determination. Work with a titration time (extraction time) of at least 3 min. The reagent in the anode compartment of the measuring cell has to be exchanged after four sample additions (corresponding to a total of 20 g sample) as the added sample lowers the conductivity of the anolyte.

Reagents for volumetric titration:

Solvent: methanol (containing max. 0.01% water)

Titrant: Hydranal Composite 1 (Riedel-de Haën)

Reagents for coulometric titration:

Hydranal Coulomat AG and Hydranal Coulomat CG (Riedel-de Haën)

Settings:	701 KF Titrino	737 KF Coulometer
>titration parameters		smpl.req: on
extr.time	180 s	d.start 20 ug/min
stop crit.:	drift	extr. 180 s
stop drift	30 uL/min	stop drift: auto
>preselections		delay time 3 s
conditioning:	on	report: full
req.smpl size	on	
report	full	