

KF Application Note No. K- 32

Title: Water in acetophenone and benzophenone

Summary: The water content of acetophenone and benzophenone is determined according to Karl Fischer using special KF reagents for ketones/aldehydes in order to prevent unwanted side reactions.

Sample: Acetophenone, benzophenone

Sample Preparation: Benzophenone is liquefied in an oven at 50 °C (melting point 48 °C).

Instruments and Accessories: 701 KF Titrino, 720 KFS Titrino or 758 KFD Titrino or 737 KF Coulometer (cell without diaphragm), 703 Titration Stand, printer

Analysis: **Volumetric titration:**
Pour ca. 25 mL solvent into the titration vessel and condition it. Then add ca. 5 g sample (for benzophenone use a syringe without needle) and start the water determination.

Reagents:

Solvent: Hydranal Working Medium K (Riedel-de Haën)

Titration: Hydranal Composite 5 K (Riedel-de Haën)

Coulometric titration:

Condition the measuring cell until a steady drift is attained. Then add ca. 0.5 g acetophenone or ca. 1 g benzophenone and start the water determination.

Reagents:

Hydranal Coulomat AK (Riedel-de Haën)

Settings: 737 KF Coulometer

smpl.req:	on
d.start	20 ug/min
extr.	0 s
stop drift:	auto
delay time	3 s
report:	full