

# KF Application Note No. K- 14

**Title:** Water in diesel fuel and petrol (gasoline)

**Summary:** The water content of diesel fuel and petrol (gasoline) is determined according to Karl Fischer. Because of the low water content the determinations are carried out by coulometric titration.

**Sample:** Diesel fuel T105  
Gasoline 313 and T51

**Sample Preparation:** none

**Instruments and Accessories:** 737 KF Coulometer, cell without diaphragm, 728 Magnetic Stirrer, printer

**Analysis:** Fill ca. 100 mL Hydranal Coulomat AG-H into the cell and condition until the drift is steady and below 10 ug/min. Prior to each injection rinse the syringe with the sample solution. Inject 2 ... 5 g sample into the cell (the exact sample mass is determined by difference weighing) and start the automatic determination.

**Reagents:**  
Hydranal Coulomat AG-H (Riedel-de Haën)

**Results:** Diesel T105: AVG(3) = 94.3 +/- 2.3 ppm water  
Gasoline 313: AVG(3) = 45.9 +/- 1.5 ppm water  
Gasoline T51: AVG(3) = 108.8 +/- 3.5 ppm water

**Settings:** 737 KF Coulometer

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