



# 860 KF Thermoprep

Simple, safe, precise.  
Thermal sample preparation  
in Karl Fischer titration.

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CAN  
TRUST**

**Metrohm  
means ...  
Spectroscopy!**



 **Metrohm**

# The Karl Fischer oven method

## Precise results

- Identical analysis conditions for all samples guarantee results of the highest precision.
- Thanks to the heated outlet tubing the released moisture is transferred quantitatively to the titration cell.

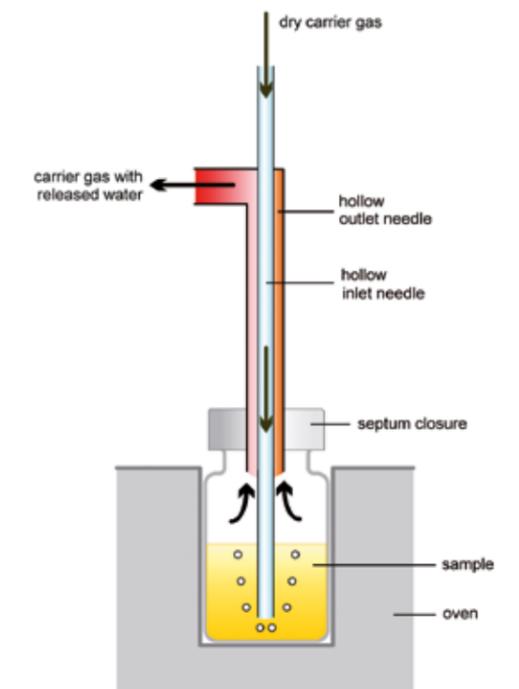


## For various reasons many substances are not suitable for a direct Karl Fischer titration:

- They release their water only slowly
- The water is released at high temperatures only
- The substances are poorly soluble in alcohols
- They undergo side reactions with KF reagents
- They contaminate the titration cell or the electrodes

By using the KF oven method the above-mentioned problems can be avoided. The substance under investigation is heated in a hermetically sealed vial in the oven. The water vapor released is transferred to the titration cell by a carrier gas. This means that no noxious solubilizers have to be used, side reactions as well as matrix effects are absent and the contamination of the titration cell is avoided.

Depending on the sample's water content, the determination can be carried out either by coulometric or volumetric Karl Fischer titration.



## THE MEASURING PROCEDURE – STEP BY STEP

The sample is weighed into a sample vial and hermetically sealed. After the desired temperature has been reached and the titration cell conditioned, the determination is started at the KF coulometer (or KF titrator).

The vessel containing the sample to be analyzed is positioned in the oven and the needle inserted through the septum of the sample vial.

### 1.

Weigh in the sample



### 4.

Start the determination on the KF coulometer



### 5.

For your safety: You can be sure to always hit the septum. The guiding support prevents the needle from descending outside the septum area.



### 2.

Seal the vial



### 3.

Place the vial in the oven



### 6.

Simple operation: The control unit with the clearly structured menu greatly facilitates work with the 860 KF Thermoprep.



### 7.

End of titration: After the titration the vial is removed from the oven



## SAMPLE VESSELS OF DIFFERENT SIZES

As an option, there is the possibility to modify the oven of the 860 KF Thermoprep in such a way that you can use not only the Metrohm standard sample vials but also those used in your production plant.



### ORDERING INFORMATION

Instrument	
2.860.0010	860 KF Thermoprep
Optional accessories	
2.851.0110	851 Titrande
2.852.0150	852 Titrande
2.1028.0110	Eco Coulometer
2.917.0110	917 Coulometer
2.915.0110	915 KF Ti-Touch
6.1448.050	Aluminum septum caps, 1000 pieces
6.2049.050	Needle support
6.2419.000	Vials 6 mL, 1000 pieces

