

**ABADIS POYA CHEMIE SHIRAZ**

---

MANUFACTURER OF VARIOUS  
VOLUMETRIC AND COULOMETRIC  
KARL FISCHER REAGENTS

---



## ABADIS POYA CHEMIE SHIRAZ

We are proud to have acquired the technical knowledge for synthesizing various types of Karl Fischer reagents and to have produced these reagents on a commercial scale. The advantages of our products include enhanced efficiency, improved stability, prevention of precipitate formation, greater sample homogeneity in the reagent, increased measurement accuracy, and better kinetic performance.

[POYASHIMI.COM](http://POYASHIMI.COM)



OUR EXPERTISE VOLUMETRIC AND COULOMETRIC  
KARL FISCHER REAGENTS



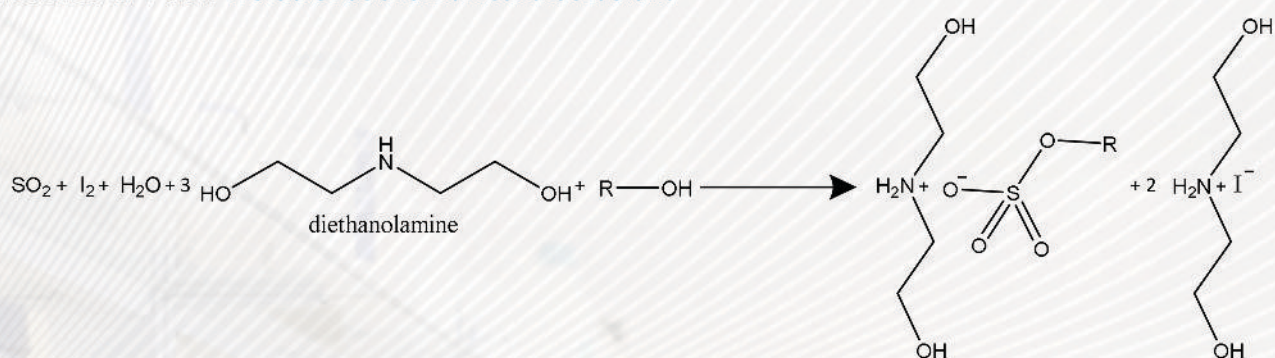
## VOLUMETRIC AND COULOMETRIC KARL FISCHER REAGENTS

Use for the determination of trace amounts of water in a sample

### Karl Fischer Titration: **A Trusted Method for Water Content Analysis**

Karl Fischer titration is a trusted method for measuring water content in various industrial products. It is renowned for its high accuracy, specificity for water, and speed. This method is widely used in the food, petroleum, petrochemical, cosmetic, and pharmaceutical industries.

This titration is based on a specific redox reaction in which the oxidation of sulfur dioxide by iodine occurs in the presence of water. **The core reaction is illustrated below:**



Karl Fischer titration can be performed in two ways: coulometric and volumetric. Each of these methods requires its own specific reagent.





## KARL FISCHER TITRATION TECHNIQUES

### Volumetric Karl Fischer Titration



### Choosing the Right Method: Volumetric vs. Coulometric

The two KF methods differ in how iodine is supplied. Volumetric Karl Fischer reagent contains iodine, which is directly added to the sample. This makes it suitable for measuring larger amounts of water. In contrast, coulometric titration generates the required iodine electrochemically at the anode electrode. This in-situ generation allows for extreme precision in detecting trace moisture.

Volumetric titration is applicable for measuring water content of 0.1% or more.

For samples with water content lower than 0.1%, a coulometric cell without a diaphragm (simpler setup) can be used.

For samples containing water lower than 0.01%, the coulometric method with a diaphragm (prevents interference, higher accuracy) is preferable.



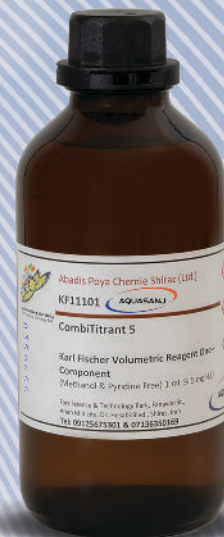
### CombiTitrant 5



#### Type:

Karl Fischer volumetric reagent  
One –Component

(methanol free & pyridine free) 1 mL  $\equiv$  5 mg H<sub>2</sub>O



Cat. No.

KF11101



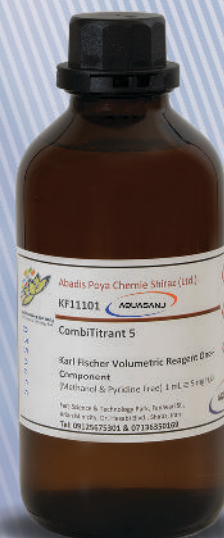
### CombiTitrant 2



#### Type:

Karl Fischer volumetric reagent  
one – component

(methanol free & pyridine free) 1 mL  $\equiv$  2 mg  
H<sub>2</sub>O



Cat. No.

KF11102



## CombiSolvent



### Type:

Methanol-free solvent  
for volumetric Karl Fischer titration  
with one component reagents



Cat. No.

KF11203

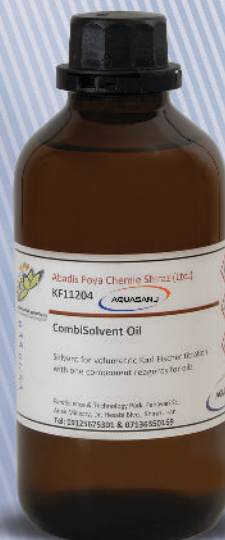


## CombiSolvent Oil



### Type:

Solvent for volumetric Karl Fischer  
titration with  
one component reagents for oils



Cat. No.

KF11204



## CombiCoulomat frit M255



### Type::

Karl Fischer coulometric reagent  
for cells with diaphragm



Cat. No.

KF21101



## CombiCoulomat fritless M257



### Type::

Karl Fischer coulometric reagent  
for cells with/without diaphragm



Cat. No.

KF21202



## CombiCoulomat fritless AG-H



### Type::

Karl Fischer coulometric reagent  
for cells with/without diaphragm



Cat. No.

KF21203



+98-912-567-5301

+98-917-300-0970



POSTAL CODE:7197688807



COMPANYAPCS@GMAIL.COM

POYASHIMI.COM