

HYDRANAL®-Moisture Testkit..... Simple, rapid, portable and economical moisture determination without expensive equipment.

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When you want a quick, portable method to measure a sample's moisture content, for example in field sampling operations, the **HYDRANAL®-Moisture Testkit** may be just what you need. The Testkit works on the Karl Fischer principle, like the rest of our **HYDRANAL®** line. Basically, sulfur dioxide is oxidized in the presence of iodine with ensuing consumption of water; excess iodine gives the characteristic yellow color. The end point of the titration is indicated by a sharp color change. Water levels from 0.001% to (>10%) in samples from 10µL to 20mL can be analyzed using this Testkit. Depending on the amount of water present, it is possible to carry out double or triple measurements in a single titration vessel.

The operation is simple (**Figure 1**). Pre-weighed sample is added to the provided glass vessel. **HYDRANAL®-Solvent E** is added and the vessel is sealed tightly and shaken. With the provided syringe, **HYDRANAL®-**

Titrant Reagent (Cat. No. 37857) is slowly added through the septum with shaking. When the abrupt color change to yellow occurs, all of the water in the sample has been titrated signaling the endpoint. By measuring the volume of **HYDRANAL®-Titrant Reagent** added, and knowing the mass or volume of sample and the titre of the titration solution, the % moisture can be easily determined.

The test kit uses safe, non-toxic and easily disposed of ethanol-based reagents. Each box contains two 500 mL bottles of **HYDRANAL®-Solvent E**, **HYDRANAL®-Titrant 5E** in a 100 mL glass bottle with septum, and one 100 mL bottle **HYDRANAL®-Standard 5.00** for titre determination. The kit also contains a funnel for pouring the Solvent (Cat. No. 34730) into the bottle which acts as the titration vessel, and 1mL and 5mL syringes and needles.

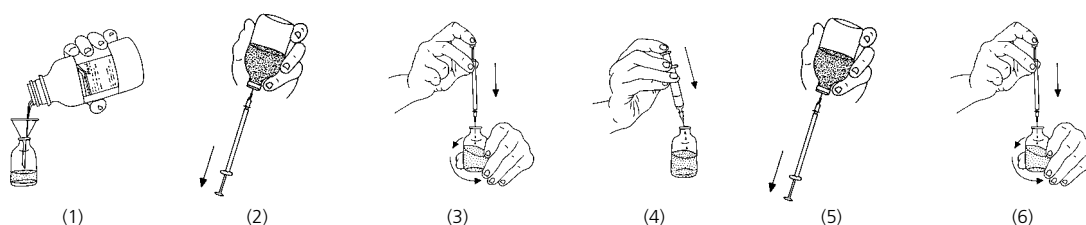


Figure 1 Simple, manual operation of **HYDRANAL®-Moisture Testkit**

- (1) Filling with **HYDRANAL®-Solvent E**
- (2) Filling of the titration syringe
- (3) Pre-titration
- (4) Application of the sample
- (5) Filling with **HYDRANAL® Titrant**
- (6) Titration

Table 1.... Ordering Information

Cat. No.	Brand	Product	Use
37858	Riedel-de Haën	HYDRANAL®-Moisture Testkit	Test kit for the visual determination of moisture content
37857	Riedel-de Haën	HYDRANAL®-Titrating Reagent for Testkit	refill pack for HYDRANAL®-Moisture Testkit
34730	Riedel-de Haën	HYDRANAL® Solvents E	500mL
34813	Riedel-de Haën	HYDRANAL® Standards 5.00	100mL