# **Aqueous Phase Activity Kit**

## Description

Fann's Aqueous Phase Activity Kit is designed for use in the determination of aqueous phase activity of emulsified water using an electro hygrometer by the method described in American Petroleum Institute's API Recommended Practice RP 13 B-2. This kit includes special flasks and relative humidity standards (premixed saturated salt solutions).

The Electro Hygrometer is a portable humidity sensor and indicator. Electro Hygrometers are used to measure the relative humidity (RH) in a closed air space above an oil-based drilling fluid.



# **Application**

Hole conditions in water sensitive shales can be correlated with changes in the activity of emulsified water in oil-based drilling fluids. Using a hygrometer is the preferred method for determining the activity in oil-based drilling fluids.

#### **Features and Benefits**

- Lightweight carrying case
- Detachable RH probe housed in rugged thermoplastic cylinder
- Fast, precise measurements
- Large LCD display for improved readability
- Smooth membrane keyboard with 4 keys for simple and quick operation
- Water-resistant
- Built-in temperature sensor



Electro Hygrometer Specifications	
Relative Humidity Range	5.0 to 95.0% RH
Temperature Range	32°F to 140°F 0.0°C to 60°C
Resolution	0.1% RH 1°F / 0.1°C)
Accuracy	± 2% RH ± 1°F / ± 0.4°C
Relative Humidity Probe	Thin film, polymer sensor
Battery Type/Life	4 x 1.5 V AA 500 hours of continuous use
Environment	32°F to 122°F 0°C to 50°C RH 100%

## **Ordering Information**

Part No. 204197 - Aqueous Phase Activity Kit

#### **Included Parts:**

- 205073 Seal Ring, 1.5 x 0.75 x 0.040 in (2)
- 205625 Stopcock Lubricant Grease, 75 g
- 205914 Erlenmeyer Flask, Glass, 250 g (5)
- 205290 Rubber Stopper #6 (5)
- 206671 Digital Hygrometer
- 206663 —Zinc Chloride, 0.100 a<sub>w</sub>, 100 ml
- 206668 Calcium Nitrate, 0.505 a<sub>w</sub>, 100 ml
- 206669 Ammonium Sulfate, 0.800 a<sub>w</sub>, 100 ml
- 206670 Calcium Chloride, 0.295 a<sub>w</sub>, 100 ml
- 209941 Calcium Chloride Powder, 2 oz
- 372313 —Operating Instructions

Fann Instrument Company offers a complete line of equipment, materials, and supplies for analyzing various drilling fluids and oil well cements in accordance with API Specifications and API Recommended Practices.

