

FORMALDEHYDE TEST KIT

Ranges 0-10 and 0-1%

Model FM-1

Cat. No. 21831-00



TO ENSURE ACCURATE RESULTS PLEASE READ CAREFULLY BEFORE PROCEEDING:

Samples containing 1 to 10 % formaldehyde will require dilution with demineralized water. For your convenience a demineralizer bottle is supplied with this kit. *See Demineralizer Bottle Instructions for use.*

The plastic dropper eventually may fail to discharge the entire 1-mL sample. It is suggested that the dropper be replaced after 10 tests.

Glassware should be rinsed with clean water after each test.

Chlorine concentrations of up to 80 mg/L and hardness concentrations of up to 1000 mg/L as CaCO_3 do not interfere with this test. The test is accurate over a pH range of 2 to 11 and over a temperature range of 10 to 35°C (50 to 95°F).

WARNING: The chemicals in this kit may be hazardous to the health and safety of the user if inappropriately handled. Read all warnings before performing the test and use appropriate safety equipment.

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Demineralizer Bottle Instructions

1. Remove the cap from the demineralizer bottle and fill with tap water. Be careful not to lose any of the blue ion exchange resin from the bottle.
 2. Replace the cap. Shake the bottle. The demineralized water is ready for use.
 3. Flip up the nozzle and dispense demineralized water as needed.
- The demineralizer bottle may be reused until the resin changes from purple to gold. At that time the resin must be replaced.

Range 0-10% Test Instructions

1. Fill the marked plastic dropper to the 1-mL mark with the sample to be tested. Discharge the contents of the dropper into the square mixing bottle.
2. Add demineralized water to the 10-mL mark and swirl to mix as shown in *Figure 1*.
3. Use the clippers to open one Formaldehyde 1 Reagent Powder Pillow. Add the contents of the pillow to the bottle and swirl for 20 seconds.
4. Add two drops of Thymolphthalein Indicator Solution to the bottle. Swirl to mix for five seconds.
5. Hold the dropper vertically above the mixing bottle and add Sulfuric Acid 1.90N drop by drop to the bottle. Swirl the bottle after each drop is added. Count each drop as it is added and continue to add drops until the color changes from blue to colorless.
6. Each drop of Sulfuric Acid 1.90N used to bring about the color change is equal to 0.5% formaldehyde (drops \times 0.5% = % formaldehyde). If only one drop is needed to bring about the color change, follow the procedure for the 0-0.5% range.

Range 0-1% Test Instructions

1. Fill the square mixing bottle to the 10-mL mark with the sample to be tested.

2. Use the clippers to open one Formaldehyde 1 Reagent Powder Pillow. Add the contents of the pillow to the bottle and swirl to mix for 20 seconds. Swirl as shown in *Figure 1*.
3. Add two drops of Thymolphthalein Indicator Solution to the bottle and swirl to mix for five seconds.
4. Hold the dropper vertically above the mixing bottle and add Sulfuric Acid 1.90N drop by drop to the bottle. Swirl the bottle after each drop is added. Count each drop as it is added, and continue to add drops until the color changes from blue to colorless.
5. Each drop of Sulfuric Acid 1.90N used to bring about the color change is equal to 0.05% formaldehyde (drops \times 0.05% = % formaldehyde).

REPLACEMENTS

Cat. No.	Description	Unit
21829-66	Formaldehyde 1 Reagent Powder Pillows	pk/50
21830-37	Sulfuric Acid 1.90N	118 mL (4 oz) MDB*
21853-36	Thymolphthalein Indicator Solution	15 mL (1/2 oz) SCDB**
968-00	Clippers	each
14299-00	Demineralizer Bottle	each
311-14	Demineralizer Resin	113 g (4oz)
21247-10	Dropper	pk/10
2327-06	Mixing Bottle	pk/6

*Marked dropping bottle

**Self-contained dropping bottle

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MADE IN U.S.A.

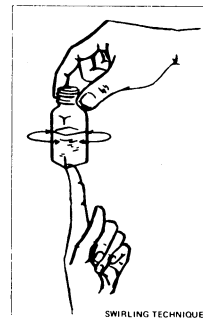


Figure 1.