

# Molybdenum (Mo) Test Kit

1 drop = 2, 5, 20 or 50 ppm

## TK3279-Z

white caps

### KIT COMPONENTS:

MO1546-B	Molybdenum Titrating Solution, 60 mL
MO1525-B	Molybdenum Buffer, 60 mL
MO1589-H	Molybdenum Indicator Powder, 10g
MO1591-B	Molybdenum Indicator Solvent, 60 mL
SY-2001-P	Syringe, 1 mL (3x)
SY-2005-P	Syringe, 5 mL
VL-1005-V	Vial, 10-50 mL (4x)

**INTERFERENCES:** High concentrations of phosphonate can create positive interferences. High concentrations of nitrites can cause negative interferences.

### SAFETY TIPS:



Wear  
Gloves



Use Eye  
Protection



Read  
SDS

### TESTING TIPS:



Collect  
Accurate  
Sample



Hold  
Bottles  
Vertically



Ensure  
Proper  
Lighting

**ATTENTION:** As necessary, calibrate this kit against a known standard made with plant / make-up water. Be sure to collect a representative sample.



**1 Rinse a vial 3 times with sample and select a sample size based on the desired drop equivalency.** For smaller sample sizes, use syringe to collect the sample and dilute to 10 mL with Molybdenum free water.

1 drop = 2 ppm	25 mL sample
1 drop = 5 ppm	10 mL sample
1 drop = 20 ppm	2.5 mL sample
1 drop = 50 ppm	1 mL sample

**Fill a second vial with 25 mL of distilled, deionized or molybdenum free tap water.**

**2 Use the 1 mL syringe to add 0.5 mL of Molybdenum Buffer (MO1525) to each sample vial.** Swirl the vials to mix.

**3 Use the other 1 mL syringe to add 2 mL of Molybdenum Indicator Solvent (MO1591) to a third sample vial.**



STEP 1



STEP 4

**4 Add 3 scoops of Molybdenum Indicating Powder (MO1589) to the third vial and swirl to dissolve.** The solvent/powder mixture will turn red/orange. Results will not be affected by undissolved crystals.

Molybdenum Indicator Solution (MO1543) may be substituted for solvent/powder mixture.

**5 Use 1 mL syringe to transfer 0.5 mL of solvent/powder mixture (vial 3) to each sample vial.** Swirl to mix.

**6 Add Molybdenum Titrating Solution (MO1546) to the vial containing your sample.** Add one drop at a time while swirling. Count the number of drops until the sample color matches the color of the blank vial or until no further color change occurs.

Multiply number of drops by equivalence factor from step 1. Record result as ppm Molybdenum (Mo).

Multiply ppm Molybdenum by 1.7 to express result as ppm Molybdate ( $\text{MoO}_4$ ).



STEP 5



STEP 6