



Mi454 - Photometer

for the determination of TARTARIC ACID in wine analysis



Mi454 is a user-friendly photometer for monitoring tartaric Acid in the process of wine making. This instrument gives you a direct reading in mg/L, with a range of 0.0 to 5.0 mg/L.

Tartaric acid is a white crystalline organic acid. It occurs naturally in many plants, particularly grapes and tamarinds, and is one of the main acids found in wine. Salts of tartaric acid are known as tartrates. It is a dihydroxy derivative of dicarboxylic acid.

These "tartrates" are harmless, despite sometimes being mistaken for broken glass, and are prevented in many wines through cold stabilization. The tartrates that remain on the inside of aging barrels were at one time a major industrial source of potassium bitartrate.

However, tartaric acid plays an important role chemically, lowering the pH of fermenting "must" to a level where many undesirable spoilage bacteria can't live, and acting as a preservative after fermentation.

Step 1

Prepare the sample to be measured with wine and tartaric acid reagent, and zero the instrument.



Step 2

Add reagent in the cuvet then insert it in the instrument and note the reading.



Mi454	Tartaric Acid
Range	0.0 to 5.0 g/L
Accuracy	typical $\pm 5\%$
Light Source	tungsten lamp with narrow band interference filter @ 525 nm
Sensor	silicon photocell
Method	the reaction of tartaric acid with the reagent causes the sample to turn orange/yellow
Environment	0 to 50°C; max RH 95%
Battery Type	4 x 1.5V AA
Auto-off	after 15 minutes of non-use
Dimensions	225 x 85 x 80 mm
Weight	0.5 kg

Accessories

Mi554-020	Tartaric acid reagent set (20 tests)
Mi0004	Tissue for wiping cuvetts (4 pcs)
Mi0026	200 μ L pipette (1 pc)
Mi0027	Pipette tips for 200 μ L pipette (25 pcs)
Mi0011	10 mL glass small cuvetts (2 pcs)
Mi0014	Caps for cuvetts for wine colorimeters (2 pcs)
Mi0013	Stopper 10 mL small cuvetts (2 pcs)
Mi0006	Battery 1.5V AA (4 pcs)



Ordering Information

Mi454 is supplied complete with: reagents for 20 tests, 200 μ L pipette, 10 mL glass small cuvetts with cap, 1 mL syringe, stopper 10 mL small cuvetts, tissue for wiping cuvetts, 4 x 1.5V AA batteries and instruction manual.

