



**Organic Acid
Analysis
Standard**

Instructions

**Catalog Number
125-0586**

For Technical Service
Call Your Local Bio-Rad Office or
in the U.S. Call **1-800-4BIORAD**
(1-800-424-6723)

Introduction

The Organic Acid Analysis Standard is a lyophilized mixture of sodium oxalate, sodium citrate, sodium malate, sodium succinate, sodium formate, and sodium acetate. The standard can be used for column testing or semi-quantitative determination. The standard is supplied as a set of 6 vials. Each vial of the lyophilized mixture is reconstituted in 1.0 ml deionized water prior to use.

Instructions

Rehydrate the sample by adding 1.0 ml of HPLC-grade deionized water. Gently shake the vial until all the solids are dissolved. Centrifuge or filter ($\leq 0.45 \mu\text{m}$) the standard before using it. Before each injection, swirl the vial to insure that the solution is evenly mixed.

Organic Acid Analysis Standard Components (per vial)
1.0 ml solution contains the following components:

Component	$\mu\text{mol/vial}$	CAS Number
Sodium oxalate	0.8	62-76-0
Sodium citrate	4.0	6132-04-3
Sodium malate	8.0	22798-10-3
Sodium succinate	20.0	150-90-3
Sodium formate	20.0	141-53-7
Sodium acetate	40.0	127-09-3

Column Testing

The Organic Acid Analysis Standard can be used to approximate the test chromatograms provided with the Aminex[®] HPX-87H column (catalog number 125-0140) and Organic Acid Analysis Kit (catalog number 125-0234). Swirl the vial and apply the appropriate volume of standard to the column (use 1.0 ml for calculations below).

Eluent: Degassed 0.004 M H₂SO₄
Flow rate: 0.6 ml/min
Temperature: 30 °C
Detector: UV @ 215 nm
Injection volume: 20 μl

Peaks	(nmole/Sample Loop)
1. Oxalate	16
2. Citrate	80
3. Malate	160
4. Succinate	400
5. Formate	400
6. Acetate	800

Storage of Reconstituted Standard

Refrigerated vials should last one to several weeks. Vials that evidence insoluble cloudiness indicate microbial contamination and must be discarded. Solutions in sealed vials can be stored at -20 °C for up to 1 year. This product is intended for research use only. It is not intended for clinical diagnostic purposes.

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