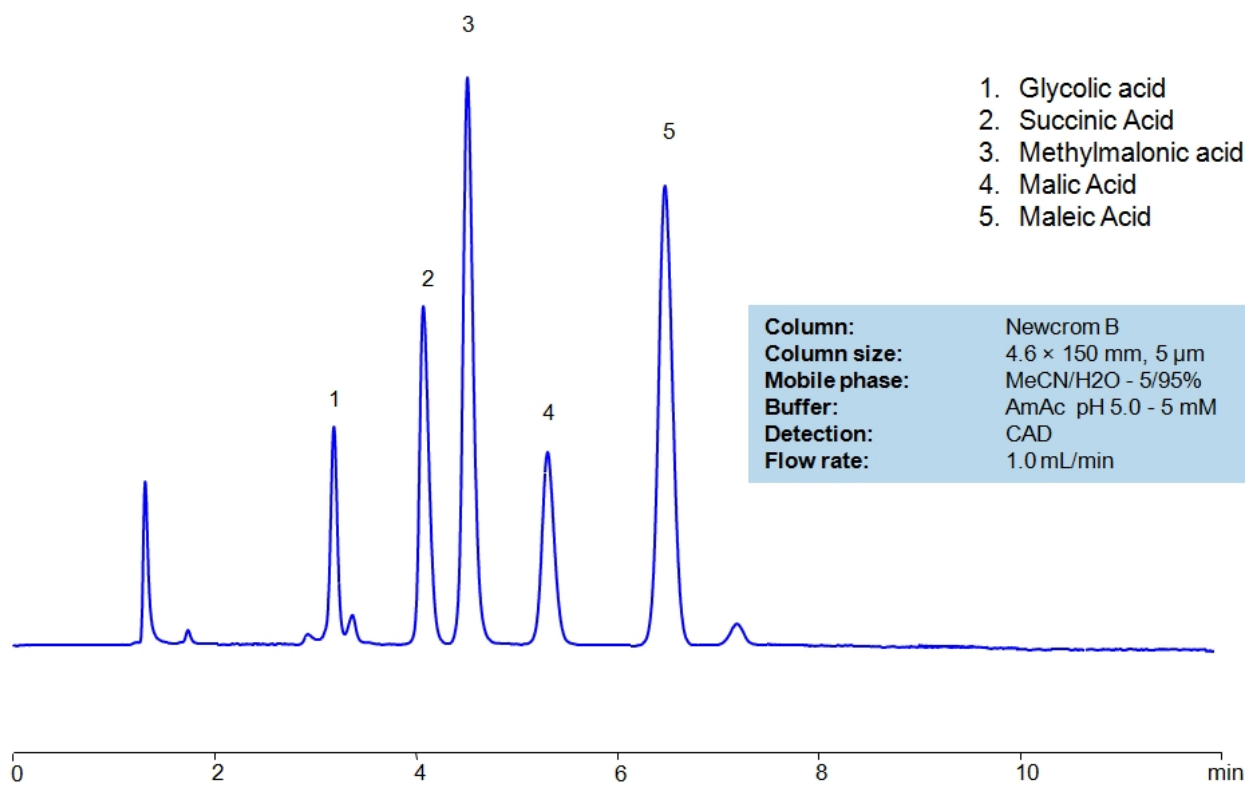


HPLC Separation of Small Organic Acids on Newcrom B Column

<https://sielc.com/hplc-separation-of-small-organic-acids>

Chromatogram



Description

High Performance Liquid Chromatography (HPLC) Method for Analysis of Glycolic acid , Malic Acid , Maleic Acid , Methylmalonic Acid , Succinic Acid , Tartaric Acid , dl-Tartaric acid , Fumaric Acid , Citric Acid , Malonic Acid , Gluconic acid .

Gluconic Acid is an organic acid with the chemical formula $C_6H_{12}O_7$. It is naturally found in fruits. Industrially, it is found in honey that is produced by fermenting starch. Typically, it is used in food, beverage, cosmetic, and skin care industries.

Malic Acid is an alpha hydroxy acid with the chemical formula $C_4H_6O_5$. It is most commonly found in fruits and wines. It is sour, which is partially why it is often used as a food additive. Besides food, it is also used in skin-care as an exfoliant.

Citric Acid is a naturally occurring organic acid found in citrus fruits; it is also an intermediate in the citric acid cycle of aerobic organisms. It is used industrially as an acidity regulator, flavoring, detergent, and more than 2 million tons are produced annually. It's chemical formula is $C_6H_8O_7$.

Tartaric Acid is an organic acid with the chemical formula $C_4H_6O_6$. It is found in fruits like grapes and tamarinds and is a vital component of wine. It is also used in metal cleaning, as an antioxidant, and as an acidulant.

Malonic Acid is an organic compound with the chemical formula $C_3H_4O_4$. It is also known as cis-butenedioic acid. It is a trans counterpart of fumaric acid. It has a variety of uses from dyeing natural fibers to oil and fat preservative, to synthesis of hydrogels.

Fumaric Acid , also known as trans-butenedioic acid, is an organic compound with $C_4H_4O_4$ chemical formula. It is used across Food, industrial, and medical industries. In food, is it often used as a preservative, pH regulator, and flavoring akin to citric acid.

Industrially, it is used in making polyester resins, polyhydric alcohols, and more. Medically, it is used in denture cleaners and its derivatives are used in treating psoriasis.

Method Parameters

Mobile Phase	MeCN/H ₂ O – 5/95%
Buffer	AmAc pH 5.0, Formic Acid
Flow Rate	1.0 ml/min
Detection	CAD (Corona) MS- compatible mobile phase
Class of Compounds	Acid, Hydrophilic, Ionizable
Analyzing Compounds	Glycolic acid, Malic Acid, Maleic Acid, Methylmalonic Acid, Succinic Acid, Tartaric Acid, dl-Tartaric acid, Fumaric Acid, Citric Acid, Malonic Acid, Gluconic acid

HPLC Column Used

Newcrom B, 4.6 x 150 mm, 5 µm, 100 Å, dual ended

[Order this column at hplc-shop.de →](http://hplc-shop.de)