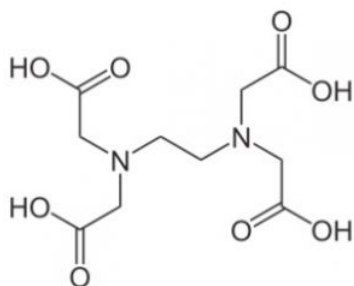
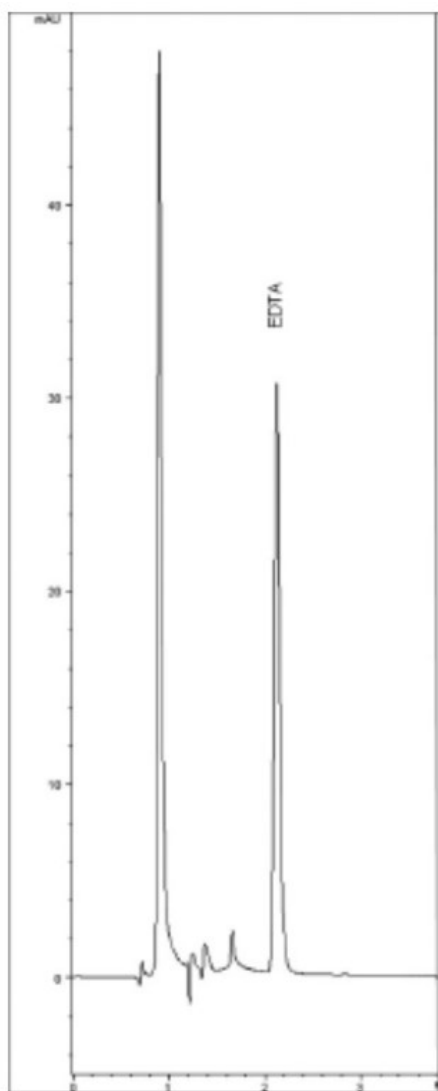


## EDTA Analyzed with HPLC – AppNote

### Very Sensitive Method for Measuring Ethylenediaminetetraacetic Acid

EDTA does not have a significant Chromophore, so to achieve UV Detection, this Method uses a Pre-Column reaction of a solution of Ferric Chloride with the sample. The resulting EDTA / Fe<sup>3+</sup> has significant UV Absorbance making this a very sensitive Method.

With this Method, Peak Shapes and Selectivity can be achieved. EDTA is extremely difficult to analyze by itself however in its complexed form, it Chromatographs well from matrices such as river sediment and other solutions.



**Peaks:**

1. Water (solvent front)

2. EDTA Fe<sup>3+</sup>

## Method Conditions

**Column:** Cogent HPS C8™, 5µm, 120Å

**Catalog No.:** 75008-15P

**Dimensions:** 4.6 x 150mm

**Mobile Phase:** 98% DI Water / 2% Acetonitrile / 0.1% Acetic Acid (pH 3.5) / 2g / L Tetrabutylammonium Sulfate

**Temperature:** 40°C

**Limit of Quantitation:** 0.2µg / mL

**Injection vol.:** 20µL

**Flow rate:** 2mL / minute

**Detection:** UV @ 258nm

**Notes:** EDTA is a synthetic metal complexing reagent that is used in a wide variety of industrial applications. Used as a preservative, it has very low biodegradability thus remains in the environment for long periods of time. Found in sewer water, freshwater and ground water, it re-solubilizes precipitated toxic metals back into solution where they can be ingested by plants and animals.



## Attachment

No 74 EDTA Analyzed with HPLC pdf 0.1 Mb [Download File](#)

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**MicroSolv Technology Corporation**

9158 Industrial Blvd. NE, Leland, NC 28451

tel. (732) 380-8900, fax (910) 769-9435

Email: [customers@mtc-usa.com](mailto:customers@mtc-usa.com)

Website: [www.mtc-usa.com](http://www.mtc-usa.com)

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