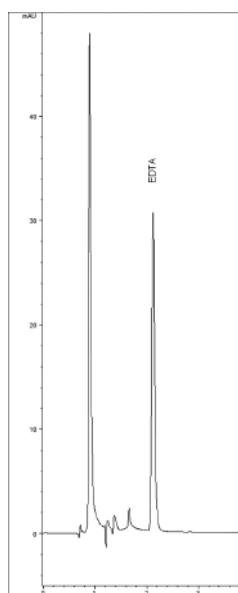
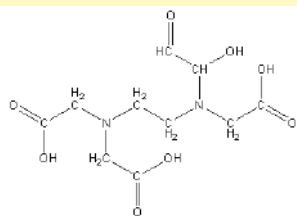


## Very Sensitive Method for EDTA: ethylenediaminetetraacetic acid



**Note:** 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

### Method Conditions

**Column:** Cogent HPS C8<sup>TM</sup>, 5µm, 120Å  
**Catalog No.:** 75008-15P  
**Dimensions:** 4.6 x 150 mm  
**Mobile phase:** 2% Acetonitrile, 98% DI Water 0.1% Acetic Acid  
 pH 3.5, plus 2g/L Tetrabutylammonium sulfate  
**Flow rate:** 2.0 mL/minute  
**Peaks:** 1. Water (solvent front)  
 2. EDTA Fe<sup>3+</sup>  
**Injection Volume:** 20 µL  
**Detection:** UV 258 nm  
**Temperature:** 40°C  
**LOQ:** 0.2µg/mL

### Discussion

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. Excellent peak shapes and selectivity make the Cogent HPS C8<sup>TM</sup> a great choice for this method.

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.

For more information visit [www.MTC-USA.com](http://www.MTC-USA.com)

Cat. No.	Description
75008-15P	Cogent HPS C8 <sup>TM</sup> HPLC Column, 5mm, 120A, 4.6mm x 150mm