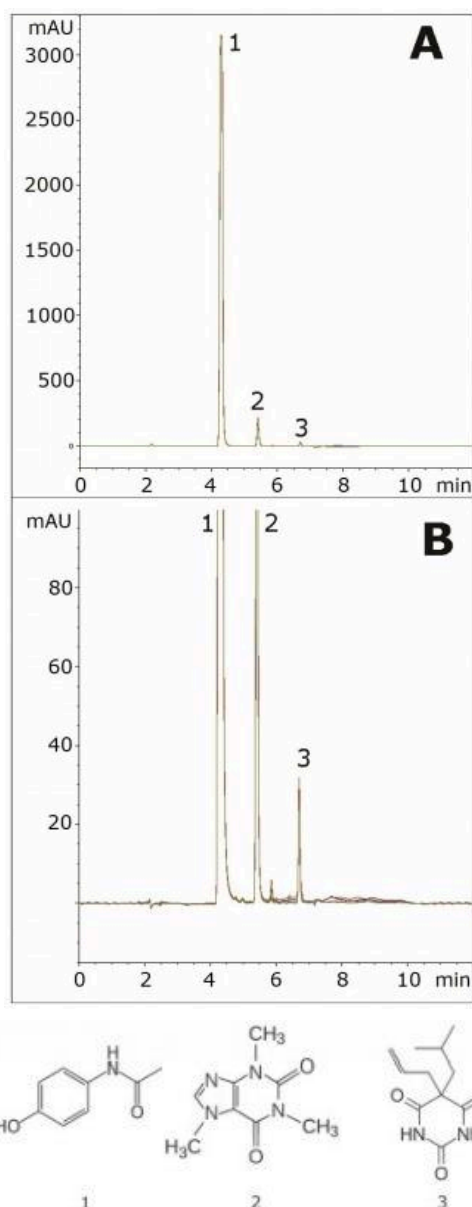


Fioricet Analyzed with HPLC - AppNote

Gradient Separation of Acetaminophen, Caffeine, and Butalbital

In this Method, a simple Reversed Phase gradient is used to separate the three components of a Fioricet tablet. *Figure A* shows the five-run overlay obtained from the gradient. *Figure B* shows a “zoomed in view” so that the Butalbital Peak can be seen clearly.



Peaks:

1. Acetaminophen
2. Caffeine
3. Butalbital

Method Conditions

Column: Cogent Bidentate C18™, 4µm, 100Å

Catalog No.: [40018-15P](#)

Dimensions: 4.6 x 150mm

Mobile Phase:

A: DI Water / 0.1% Formic Acid

B: 97% Acetonitrile / 3% DI Water / 0.1% Formic Acid

Gradient:

Time (minutes)	%B
0	10
6	70
7	10

Temperature: 35°C

Injection vol.: 10µL

Flow rate: 0.8mL / minute

Detection: UV @ 240nm

Sample Preparation:

Stock Solution: Fioricet tablet was ground, added to 10mL volumetric flask and diluted with 50:50 Solvent A / Solvent B mixture. The flask was vortexed 5 minutes and a portion of the solution was filtered with a 0.45µm Nylon Syringe Filter.

Working Solution: 10µL of the stock was diluted with 990µL of 50:50 Solvent A / Solvent B mixture.
t_o: 2.2 minutes

Note: Fioricet/Esgic is a combination of Acetaminophen, Caffeine, and Butalbital. It is used to treat tension headaches, muscle contraction headaches, and migraines.



Attachment No 137 Fioricet Analyzed with HPLC pdf 0.9 Mb [Download File](#)

Printed from the Chrom Resource Center

Copyright 2025, All Rights Apply

MicroSolv Technology Corporation

9158 Industrial Blvd. NE, Leland, NC 28451

Tel: (732) 380-8900

Fax: (910) 769-9435

Email: customers@mtc-usa.com

Website: www.mtc-usa.com