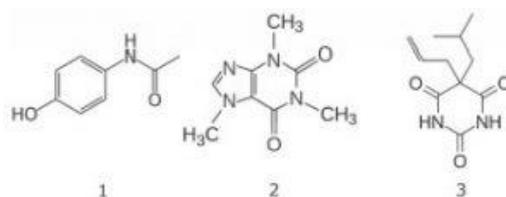
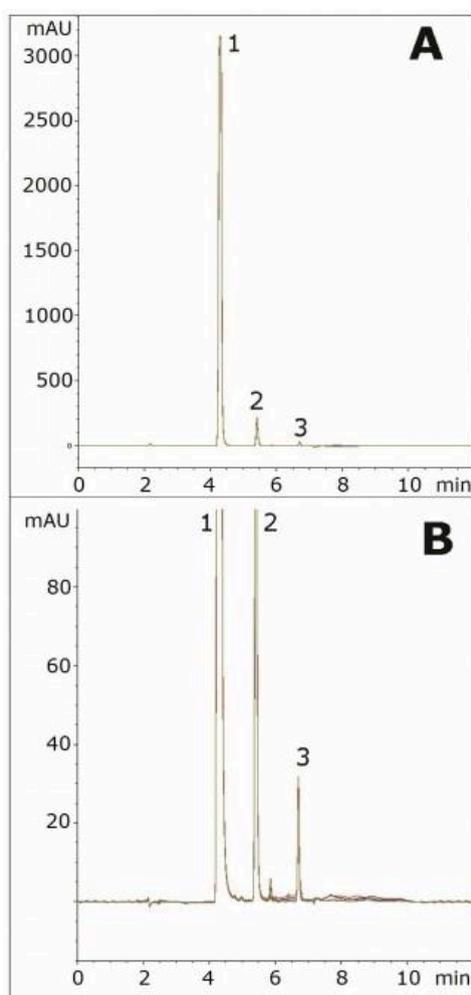


## Fioricet Analyzed with HPLC - AppNote

### 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™, 4 µm, 100 Å

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

**Dimensions:** 4.6 x 150 mm

### 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.:** 10 µL

**Flow rate:** 0.8 mL / minute

**Detection:** UV @ 240 nm

### 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<sub>o</sub>:** 2.2 minutes

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

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

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