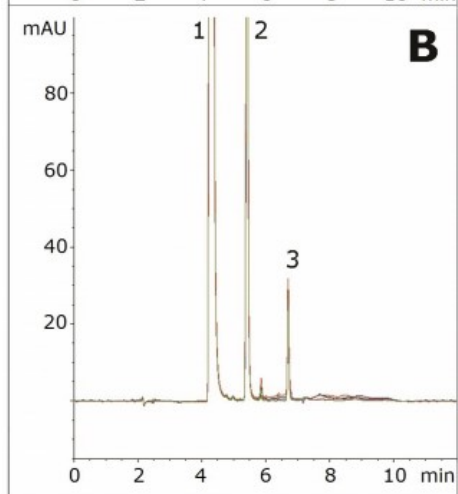
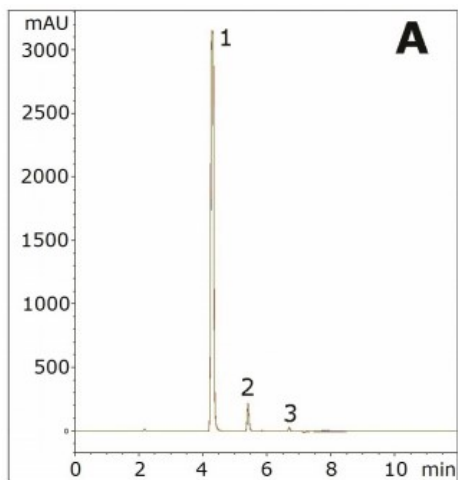
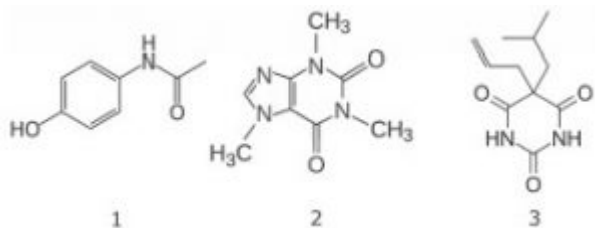


## Fioricet Analyzed with HPLC - AppNote

### **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<sub>0</sub>:** 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](#)