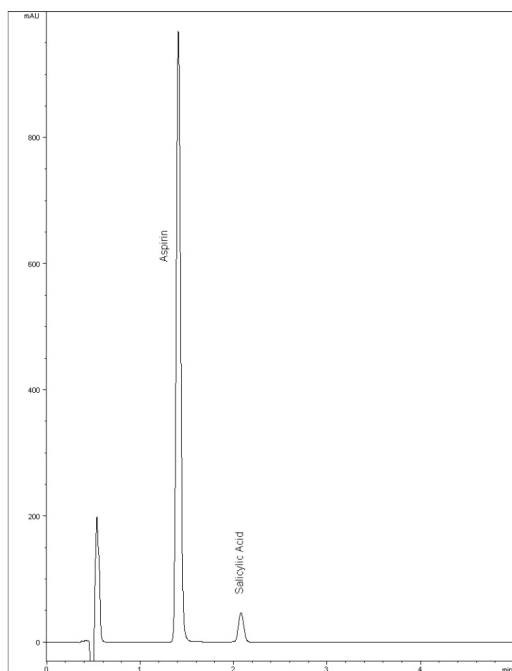
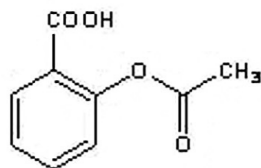


Aspirin & Salicylic Acid

Excellent Peak Shape For a Very Difficult Compound



Notes: Aspirin, or acetylsalicylic acid (ASA) is a salicylate drug, often used as an analgesic to relieve minor aches and pains, as an antipyretic to reduce fever, and as an anti-inflammatory medication. Aspirin was the first-discovered member of the class of drugs known as non-steroidal anti-inflammatory drugs (NSAIDs), not all of which are salicylates, although they all have similar effects and most have some mechanism of action which involves non-selective inhibition of the enzyme cyclooxygenase. Today, aspirin is one of the most widely used medications in the world, with an estimated 40,000 metric tons of it being consumed each year.

Method Conditions

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

Catalog No.: 40018-75P

Dimensions: 4.6 x 75 mm

Mobile Phase: 52% DI H₂O/ 48% acetonitrile/ 0.1% Phosphoric Acid

Temperature: 25°C

Injection vol.: 10µL

Flow rate: 1.5 mL/min

Detection: UV 210 nm

Peaks: 1. System Peak
2. Aspirin (Acetylsalicylic Acid)
3. Salicylic Acid

Discussion

This method is easy to prepare, use and reproduce a good separation of aspirin from its major hydrolysis product, salicylic acid. Note the excellent peak shape and selectivity. Salicylic acid can be very difficult to adequately chromatograph on columns with ordinary silica.