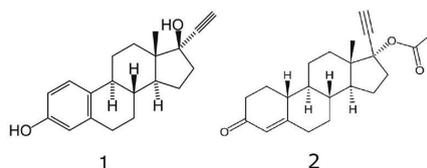
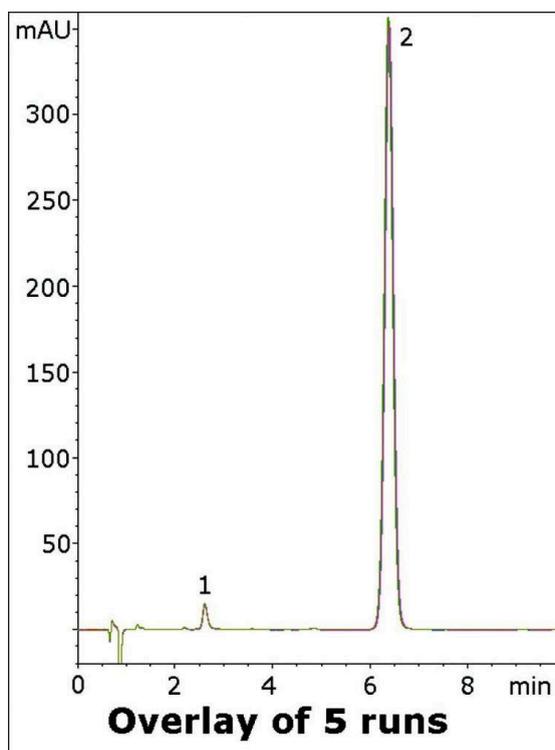


## Ethinylestradiol and Norethisterone Acetate Analyzed with HPLC - AppNote

### Isocratic Separation of Ethinylestradiol and Norethisterone Acetate Hormone Replacement Tablet

In this simple HPLC Method, two hormones from a tablet extract are separated. Both analytes are adequately retained while keeping the run time to 10 minutes.

The USP Monograph Method for Assay of the two compounds is lengthy and complex, while this Method is rapid and easy to automate. In addition, the Precision of the Method is demonstrated through the overlay of five overlaid Chromatograms shown in the Figure below.



#### Peaks:

1. Ethinylestradiol, 2. Norethisterone acetate

#### Method Conditions

Column: Cogent Bidentate C8™, 4 μm, 100Å

Catalog No.: 40008-75P

**Dimensions:** 4.6 x 75 mm

**Mobile Phase:** 50:50 DI Water / Acetonitrile with 0.1% Formic Acid

**Injection vol.:** 20 µL

**Flow rate:** 1.0 mL / minute

**Detection:** UV @ 240 nm

**Sample Preparation:** A Femhrt® tablet containing 0.5mg Norethisterone Acetate and 2.5 µg Ethinylestradiol was ground and added to a 5 mL volumetric flask. A portion of 50:50 DI Water / Acetonitrile mixture was added and the flask was sonicated for 10 minutes. Then it was diluted to mark and filtered with a 0.45 µm Nylon Syringe Filter (MICROSOLV Tech Corp.). The filtrate was used for injections. Peak identities were confirmed by individual standards.

**t<sub>o</sub> :** 0.9 minutes

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**Note :** Ethinylestradiol is a synthetic derivative of Estradiol. Norethisterone Acetate is a precursor of Norethisterone in the body.

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**Attachment No 193 Hormone Replacement Tablet Analyzed with HPLC pdf 0.3 Mb** [Download File](#)

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