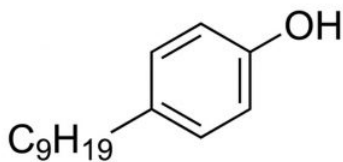
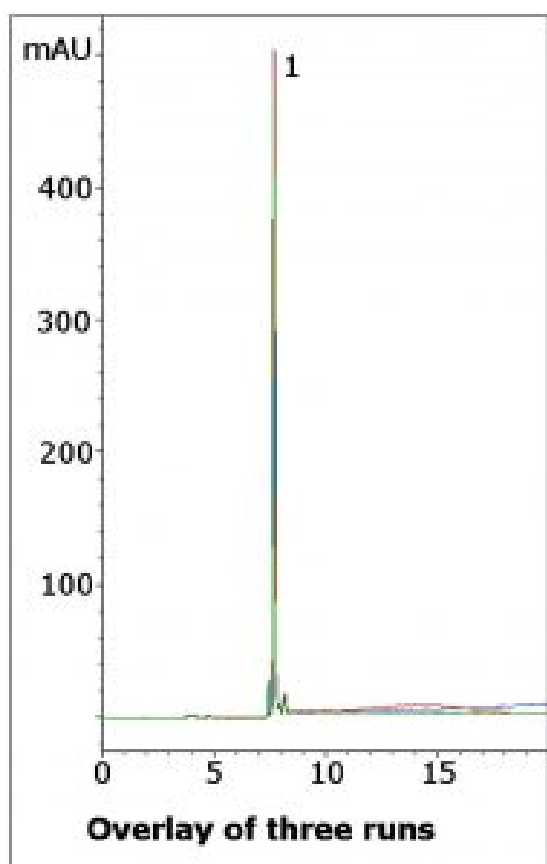


## Nonylphenol Analyzed by HPLC – AppNote

### Separation of Isomer Peaks

Nonylphenol is a very hydrophobic compound and is suitable for analysis by Normal Phase. It is produced commercially by Acid-catalyzed Alkylation of Phenol with a mixture of nonenes. Therefore a variety of product isomers are possible, with different branching of the C9 group and position of the chain on the ring.

Normal Phase HPLC is well-suited to isomer separations and in this method, separation was observed between the main peak and two smaller peaks. Three runs are shown to illustrate the repeatability, which is often a concern with Normal Phase Methods that use ordinary Silica Columns.



Nonylphenol

**Main Peak:**

### Method Conditions

**Column:** Cogent Silica-C™, 4μm, 100Å

**Catalog No.:** 40000-10P

**Dimensions:** 4.6 x 100mm

**Mobile Phase:**

A: Ethyl Acetate

B: Hexane

**Gradient:**

Time (minutes)	%B
0	100
4	100
19	90
20	100

**Post Time:** 3 minutes

**Injection vol.:** 1µL

**Flow rate:** 1.0mL / minute

**Detection:** UV @ 277nm

**Sample Preparation:** Nonylphenol reference standard dissolved in a Hexane diluent.

**t<sub>0</sub>:** 1.3 minutes

**Note:** Nonylphenols are used in synthesis as a starting material for various surfactants. They are subjected to Ethoxylation to produce Alkyl-Phenol Ethoxylates.

**Attachment**

**No 264 Nonylphenol HPLC Method pdf** 0.3 Mb [Download File](#)

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