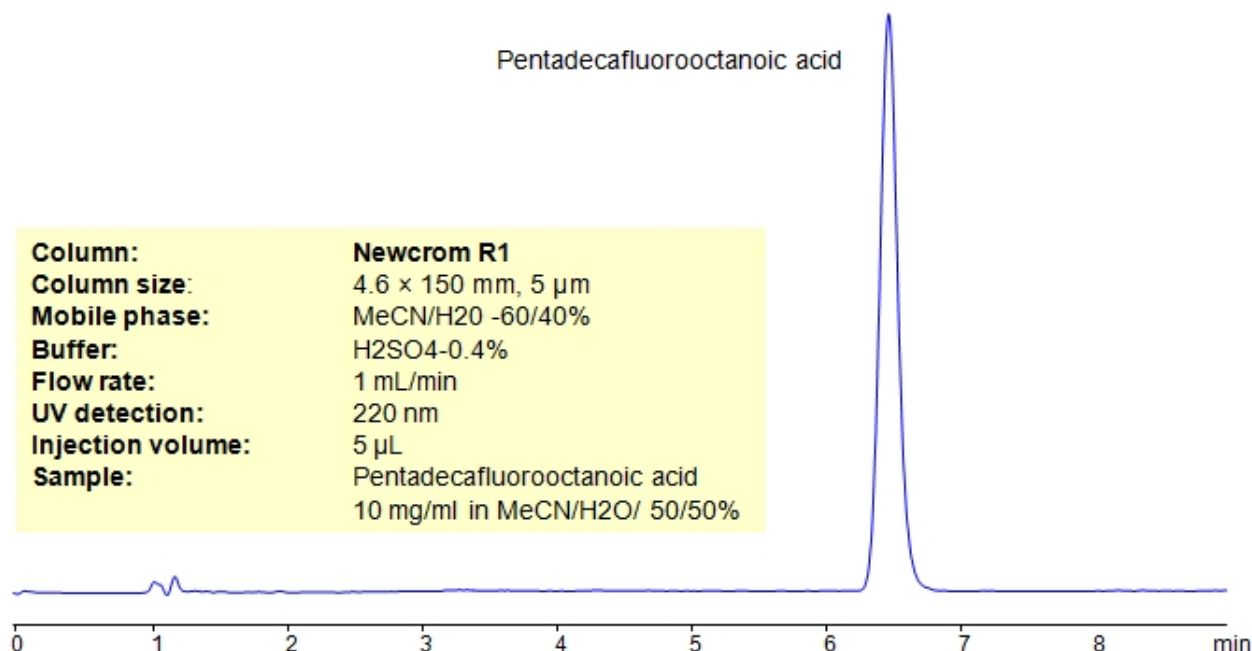


# HPLC Determination of Pentadecafluorooctanoic acid (PFOA) on Newcrom R1 Column

<https://sielc.com/hplc-determination-of-pentadecafluorooctanoic-acid-on-newcrom-r1-column>

## Chromatogram



*HPLC Determination of Pentadecafluorooctanoic acid on Newcrom R1 Column*

## Description

· High Performance Liquid Chromatography (HPLC) Method for Analysis of Perfluorooctanoic acid (PFOA) .

Pentadecafluorooctanoic acid , also known as C8 due to it's chemical being C<sub>8</sub>HF<sub>15</sub>O<sub>2</sub> , is an industrial surfactant. It is classified by the IARC as a carcinogen to humans. Due to it not breaking down via natural processes, it is also considered a "forever chemical." It can easily move through soil and contaminate water, leading up to it building up[ in fish and wildlife. Despite that, it has wide use across industries from upholstery, to floor wax, to fire fighting sealants. PFOA was a key point in a renowned legal case of Robert Bilott against DuPont.

Perfluorooctanoic acid (PFOA) can be retained and analyzed using the Newcrom R1 stationary phase column. The analysis utilizes an isocratic method with a simple mobile phase consisting of water and acetonitrile (MeCN) with a sulfuric acid buffer. Detection is performed using UV.

## Method Parameters

|              |                                       |
|--------------|---------------------------------------|
| Mobile Phase | MeCN/H <sub>2</sub> O – 60/40%        |
| Buffer       | H <sub>2</sub> SO <sub>4</sub> – 0.4% |
| Flow Rate    | 1.0 ml/min                            |
| Detection    | UV, 220 nm                            |

|                            |                               |
|----------------------------|-------------------------------|
| <b>Class of Compounds</b>  | Acid, Hydrophobic             |
| <b>Analyzing Compounds</b> | Perfluorooctanoic acid (PFOA) |

#### HPLC Column Used

**Newcrom R1, 4.6 x 150 mm, 5 µm, 100 Å, dual ended**

[Order this column at hplc-shop.de →](https://www.hplc-shop.de)