Application Note: Omeprazole



Omeprazole belongs to a class of drugs known as Proton Pump Inhibitors (PPI's). It is used in the treatment of conditions relating to overactive stomach acid such as gastroesophageal reflux disease, peptic ulcers and Zollinger-Ellison syndrome.

Omeprazole was patented in 1978, and approved for medical use in 1988. It is on the World Health Organization's List of Essential Medicines. It is available as a generic medication. In 2020, it was the eighth most commonly prescribed medication in the United States, with more than 56 million prescriptions.

This application shows the use of an Horizon C8 column for the analysis of omeprazole in accordance with the United States Pharmacopoeia (USP) monograph.

CH₂

Omeprazole

Column:

Horizon C8, 5µm

150x4.6mm

Mobile Phase: 75:25 Buffer*/Acetonitrile

Flow rate:

0.8ml/min

Wavelength:

280nm

Temperature: 25°C

^{*1.51} mM monobasic sodium phosphate, 7.88 mM dibasic sodium phosphate, phosphoric acid, pH 7.6