

High Performance Liquid Chromatograph (HPLC)



Make	Model
Perkin Elmer	Series 200

Brief Description:

High Performance Liquid Chromatograph (HPLC) Perkin Elmer Series 200 Diode array detector; UV detector and Fluorescence detector ;Column switching accessory Separation and detection of different components of complex mixtures; Qualitative/quantitative analysis.

Specification:

- ❖ Work on Isocratic and Gradient Mode, Operating work pressure 6200 PSI, Available Column: RP-18 (250mm x 4.6 mm, 5 μ m), C-18 (250mm x 4.6 mm, 5 μ m),Nucleosile C-8 (150mmx4.6mm, 5 μ m), Protonsil C-18 ODS AQ(250mm x 4.6 mm, 5 μ m), Wakosil II 5 C-18 RS (150x4.6 mm),.wakosil 5 C-8 RS (150x4.6 mm,5 μ m),GL Exsil SCX (250x4 mm, 5 μ m), GL Exsil ODS (250x4 mm, 3 μ m),SS Exsil CYANO (250x4.6 mm, μ m),GL Exsil SAX (250x 4 mm,5 μ m), SS Wakosil C-18 AR (150x4.6 mm, 5 μ m), GL Nucleosil ODS (250x 1.0 mm,5 μ m)
- ❖ Pump specification (quaternary gradient system): Flow rate 0.01 to 10 ml/min, Pressure range: 0 to 6200 psi
- ❖ Series 200 vacuum degasser flow rate:10 ml/min,chanel :2 or 4 independent
- ❖ Series 200 Column oven: operating range: 5 °c above ambient to 100 ° c

- ❖ Diode Array detector: Detection type : Single beam polychromators, Source:Duterium and tungsten-halogen,Wavelength range: 190-700 nm,No of diodes :512, Sensitivity range 0.0001 to 2.0 AUFS
- ❖ UV detector range 190 nm to 400 nm
- ❖ Fluorescence detector

Applications

HPLC is one of the most widely applied analytical separation techniques. When you start to look at some of the web sites of some of the vendors that sell HPLC columns, you start to get a glimpse of just how widespread these applications are. If you can think of a complex mixture, there is probably an HPLC method that has been developed to tackle the separation.

Pharmaceutical

Tablet dissolution of pharmaceutical dosages
 Shelf-life determinations of pharmaceutical products
 Identification of counterfeit drug products
 Pharmaceutical quality control

Environmental

Phenols in Drinking Water
 Identification of diphenhydramine in sediment samples
 Toxicity of tetracyclines and tetracycline degradation products to environmentally relevant bacteria

Forensics

Forensic analysis of textile dyes
 Determination of cocaine and metabolites in meconium
 Simultaneous quantification of psychotherapeutic drugs in human plasma

Clinical

Analysis of antibiotics

Food and Flavor

Ensuring soft drink consistency and quality
 Analysis of vicinal diketones in beer
 Sugar analysis in fruit juices
 Polycyclic aromatic hydrocarbons in vegetables and fruits
 Trace analysis of military high explosives in agricultural crops
 Stability of aspartame in the presence of glucose and vanillin