

Instruction manuals

FlexFire Fusion UHPLC/HPLC

Management No.20230310SO

Thank you for purchasing a FlexFire Fusion UHPLC/HPLC column. Please read and follow this instruction manual carefully to ensure that your column provides reliable chromatography. Failure to comply with this instruction manual may void the column warranty.

Before use

Please check that the column you received is the same as the column you ordered. Additionally, a column, pre-shipment inspection report, and CoA report are included with FlexFire Fusion.

If it is not enclosed or is lost, please contact us or the agency where you purchased it. These reports can also be searched from our website.

How to use columns

(i) Installation

The direction of flow is indicated on the column tag. Unless there is a special need to clean from the opposite side, please pass the liquid in the same direction.

(ii) Conditioning

The specified shipping solvent is sealed in the column after purchase. During conditioning, all components of the mobile phase and encapsulation solvent must be mixed.

When using a highly concentrated buffer solution, replace it with a water-rich mobile phase before passing the solution through. The guideline for equilibration is 10 times the column volume. If it is 4.6x150mm, approximately 25mL of liquid will be required. When passing liquid, increase the flow rate gradually to prevent a sudden pressure increase. Additionally, FlexFire Fusion HILIC can be used in HILIC mode and normal phase mode. The solvent for HILIC mode (acetonitrile/water) is sealed at the time of shipment, so when using in normal phase mode, pass ethanol or propanol as an intermediate solvent and then replace it with the desired mobile phase. please.

(iii) Analysis

Analysis must be performed based on the column specification table (P02).

Column cleaning and storage

After analysis is complete, remove the buffer in the column and replace it with organic solvent/water before storing. Storage in 100% organic solvent or 100% water can lead to drying of the filler and generation of microorganisms.

The encapsulation solvent is generally acetonitrile/water or methanol/water, and equilibration can be achieved in the shortest possible time by selecting a solvent that matches the analysis conditions to be used next time.

When storing, tighten the end plug firmly and store in a dark place.

Other notes

Perform cleaning from the opposite side of the flow direction only if the column frit becomes clogged. If the precipitate generated by mixing the solvent and sample penetrates into the column, it may cause fatal damage such as clogging the frit or staying inside the packing material. We recommend installing a guard filter or guard column to protect the analytical column.

Document :FlexFire Fusion column spec sheet

	Fusion C30	Fusion C18	Fusion C18RS	Fusion C8	Fusion C4	Fusion Bio C4	Fusion HILIC
Pore diameter	100Å	100Å	150Å	100Å	100Å	300Å	100Å
Surface area	300m ² /g	300m ² /g	200m ² /g	300m ² /g	300m ² /g	120m ² /g	300m ² /g
Pore volume	0.8mL/g	0.8mL/g	0.8mL/g	0.8mL/g	0.8mL/g	0.8mL/g	0.8mL/g
Carbon (%)	17%	18%	12%	12%	8%	4%	—
Particle size (µm)	2, 3, 5µm	2, 3, 5µm	2, 3, 5µm	2, 3, 5µm	2, 3, 5µm	2, 3, 5µm	2, 3, 5µm
pH range	pH1-11	pH1-11	pH1-11	pH1-11	pH1-10	pH1-10	pH1-7
Temp. range (°C)	~ 80°C	~ 80°C	~ 80°C	~ 80°C	~ 80°C	~ 80°C	~ 80°C
Max Pressure (bar)	2µm: 1,000bar	2µm: 1,000bar	2µm: 1,000bar	2µm: 1,000bar	2µm: 1,000bar	2µm: 1,000bar	2µm: 1,000bar
	3µm: 600bar	3µm: 600bar	3µm: 600bar	3µm: 600bar	3µm: 600bar	3µm: 600bar	3µm: 600bar
	5µm: 400bar	5µm: 400bar	5µm: 400bar	5µm: 400bar	5µm: 400bar	5µm: 400bar	5µm: 400bar
USP category	L62	L1	L1	L7	L26	L26	L3

[CONTACT]

