HICHROM

Chromatography Columns and Supplies

LC COLUMNS
Wakopak Fluofix

Catalogue 9

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WAKOPAK® FLUOFIX®

- Unique selectivity
- High recognition capability of halogenated compounds
- Separation of geometric and positional isomers
- High durability

Fluofix® is a fluorinated silica based material for selective reversed-phase HPLC. Initially manufactured by Neos, it is now manufactured by Wako Chemicals, Japan. The newer Wakopak Fluofix-II 120E is now the recommended Fluofix phase for method development.

Wakopak Phase	Particle Size (µm)	Pore Size (Å)	Surface Area (m^2/g)	Endcapped	Application
Fluofix-II 120E	5	120	300	Yes	General analyses
Fluofix 120E	5	120	300	Yes	General analyses
Fluofix 120N	5	120	300	No	Acidic compounds

Wakopak Fluofix phases are bonded with branched chain perfluorohexyl groups on 120Å pore size silica (see Figure 1). Both endcapped and non-endcapped versions are available. They exhibit increased retention and selectivity of compounds containing fluorine and chlorine substituents when compared to C18 phases. This is due to the more polar nature of the carbon-fluorine bond in Fluofix compared to the carbon-hydrogen bond of C18 phases.

Wakopak Fluofix-II 120E has improved endcapping efficiency, in order to minimise non-specific adsorption compared with Fluofix 120E. The retention capacity of Fluofix-II 120E is comparable to that of a C4 bonded phase.

Figure 2 shows a comparison of the separation of fluorinated positional isomers using Wakopak Fluofix-II 120E, Wakopak Fluofix 120E and ODS (C18) columns. The high shape selectivity observed with Fluofix-II 120E and Fluofix 120E for halogenated isomers, is due to the extra rigidity imposed by the perfluorinated bonded phase.

Wakopak Fluofix phases are also highly selective for the analysis of non-halogenated polar compounds containing hydroxyl, carboxyl, nitro and other polar groups. This is most apparent when the functional groups are located on an aromatic or other rigid ring system.

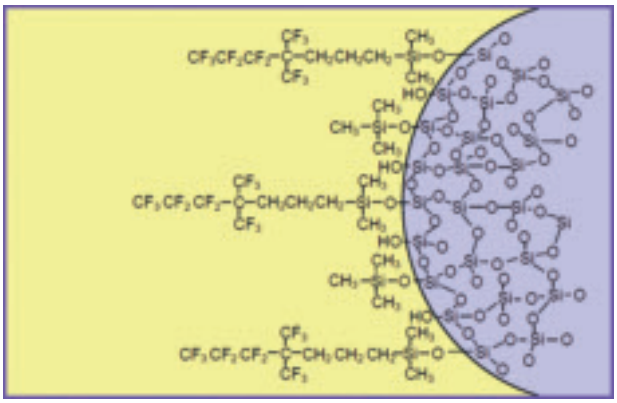

Figure 1. Schematic surface model of Fluofix

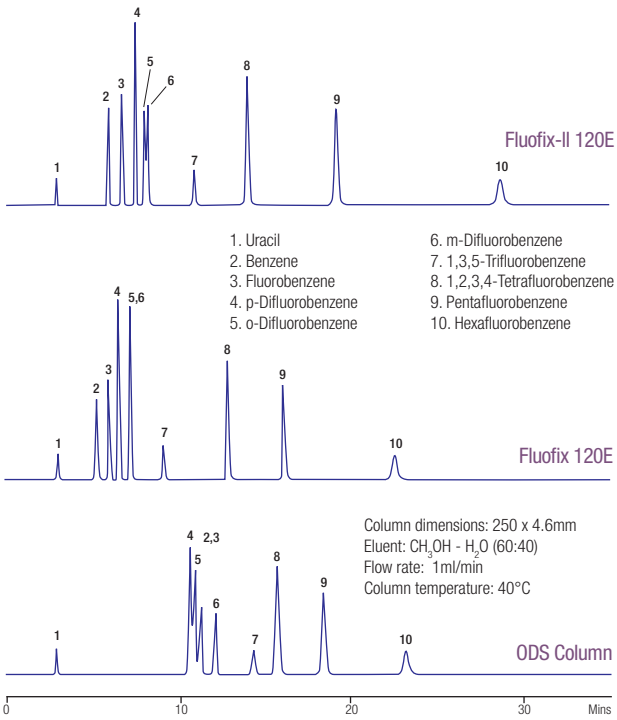

Figure 2. Fluorinated positional isomers*

*The comparative separations presented here may not be representative for all applications.

Ordering Information

Wakopak Phase	Column Dimensions[1,2] (mm)						
	50 x 2.0	150 x 2.0	250 x 2.0	30 x 4.6	50 x 4.6	150 x 4.6	250 x 4.6
Fluofix-II 120E	233-63393	236-63403	233-63413	237-63433	230-63423	239-63373	236-63383
Fluofix 120E	236-61943	233-61953	-	237-61973	234-61983	231-61993	238-62003
Fluofix 120N	230-61843	237-61853	-	231-61873	238-61883	235-61893	238-61903

[1] 10mm i.d. columns also available [2] Part numbers listed correspond to columns with Waters type endfittings. Columns with DuPont type endfittings also available – please enquire

Wakopak Wakosil columns also available – please enquire for details.