

NovaSil

Novasil is pseudo hybrid column with 100Å pore size. Its proprietary bonding provides diverse tree like structure which make surface polymerised. Hydrophobicity of the phase depends on the bonding and endcapping of a phase. Therefore, NovaSil column with multiple bonded phase have higher carbon load which ensure more hydrophobic behaviour.

These columns can be used with 100% Aqueous mobile phase due to its branch surface structure which protect surface of silica.

Separation can be happening via penetration and adsorption. These columns provide better kinetics for the separation of closely related compound. These columns show most batch to batch and column to column reproducibility

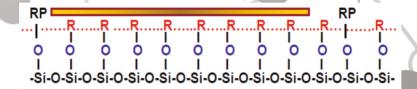


Fig-1: Shows complete end capping of NovaSil column

NovaSil C18

Novasil C18 is one of the most versatile C18 column which has highest acidic and alkaline pH stability. NovaSil C18 is most hydrophobic phase compared to all other C18 phases. This column can be used for the most difficult application which required higher acidic or alkaline pH.

- High surface area for strong retention of hydrophobic and polar compounds
- Column-to-Column reproducibility
- Suitable for separations of acidic, neutral and basic organic compounds, as well as pharmaceuticals raw material to finished product and peptides
- · Suitable for separations in organic or mixed organic/aqueous mobile phases.

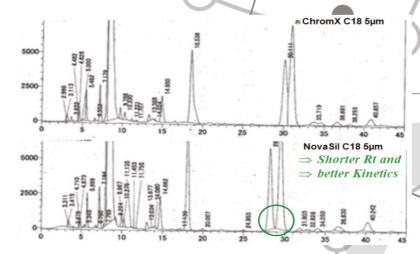


Fig-2: Shows comparison of ChromX C18 & NovaSil C18



NovaSil C8

NovaSil C8 has highest carbon load compare to all other C8 phase. It has highest working pH range. The fully endcapped uniform octyl stationary phase provide high efficiency with lower hydrophobicity. These columns recommended for separating the compounds which are strongly retained on C18 phases

- High surface area for strong retention of hydrophobic and polar compounds
 - · Column-to-Column reproducibility
 - Suitable for separations of acidic, neutral and basic organic compounds, as well as pharmaceuticals raw material to finished product and peptides
 - Suitable for separations in organic or mixed organic/aqueous mobile phases.

Physical Properties

	NovaSil C18	NovaSil C8
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Silica	High Purity ≥99.99%	
Pore Size	100Å	
Particle Size	3, 5,10 µm	3, 5, 10 µm
Surface Area	320 m2/g	
% Carbon Load	19%	11%
End Capping	Yes	Yes
pH Range	1–12	1–12

Application



 Levocetirizine HCl Assay analysis as per IP Pcolumn: NovaSil C18 5µm, 250X4.6mm, P/N:NO185025046-0

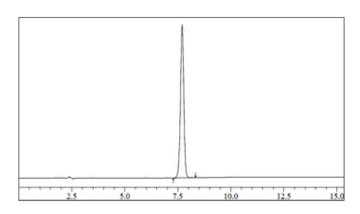
Mobile Phase: a mixture of 60 volumes of 0.05 M potassium dihydrogen phosphate and 40 volumes of acetonitrile, adjust the pH to 6.0 with 10 per cent w/v of sodium hydroxide

Flow Rate: 1.0 mL/min

Wavelength: 230nm

Injection Volume: 20µL

Sample: Levocetririzine HCl



2) Typical QC chromatogram Column:

Column: NovaSil C18 5µm, 100X4.6mm,

P/N:NO185010046-0

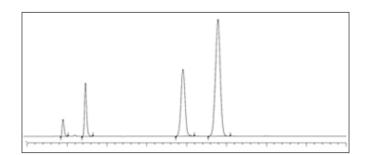
Mobile Phase: Mobile Phase: Water: ACN (35/65%V/V)

Flow Rate: 1.0 mL/min

Wavelength: 254nm

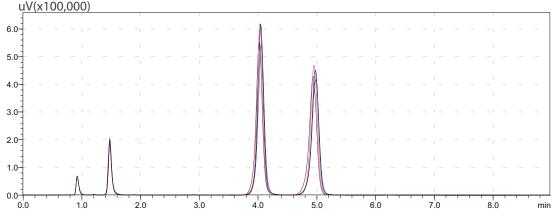
Injection Volume: 5µL

Sample: Uracil, Phenol, Toluene, Naphthalene



Column Reproducibility:

When developing analytical method for pharmaceuticals and biopharmaceutical product reproducible HPLC columns are essential. Over the lifetime of new drug development, achieving same chromatographic result is critical.NovaSil Column provide column to column and batch to batch reproducibility.



NovaSil C18 5µm, 100X4.6mm Column to Column repetability