

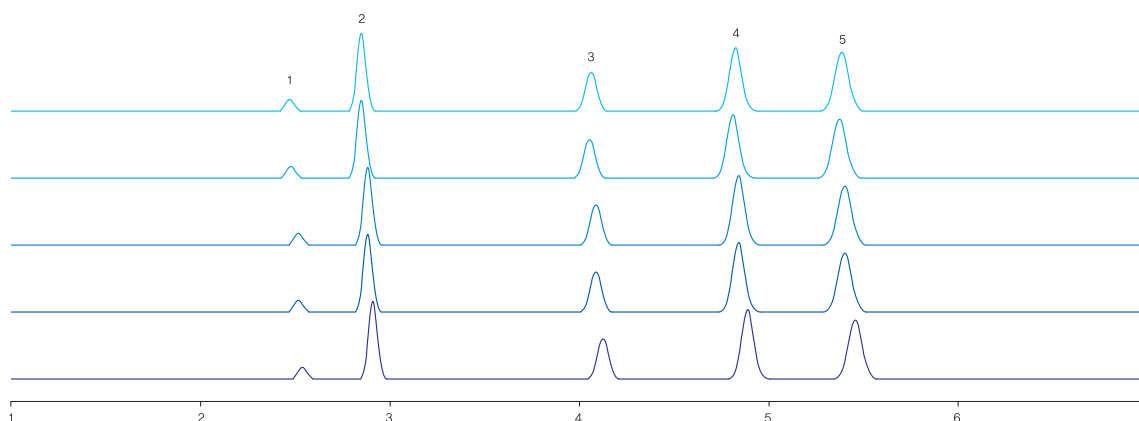
2. Hector

2-1. Hector M: First choice, Wide range application

Hector M columns are well end-capped for reproducibility and durability. Their wide range of stationary phases supports the customer demands, from the analytical to the semi-prep scales. For the reversed-phase mode, the C18, C8, C4, NH₂, CN, and phenyl phases are available, depending on the polarity. On the Other hand, Sil, NH₂, Diol and CN are available for the normal-phase mode. These normal-phase columns separate acidic, neutral, and basic compounds through the right choice of stationary phase.

- Differentiated Phases: C18, C8, C4, Phenyl, NH₂, Diol, CN, Sil
- Specification: Spherical silica, Monomerically bonded, End capped, 100 Å pore size
- Format: Analytical, Semi-prep

■ Column to column reproducibility data of Hector M C18

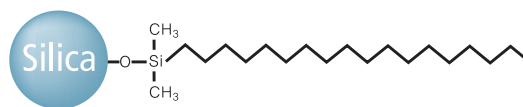


Column: Hector M C18 5 μ m
 Dimension: 250 X 4.6 mm
 Mobile Phase: MeOH / Water = 90 / 10
 Flow rate: 1.0 mL/min
 Detection: 254 nm
 Temperature: 25 °C
 Injection Volume: 10 μ L

Sample : 1. Uracil
 2. Aniline
 3. Benzene
 4. Toluene
 5. Naphthalene



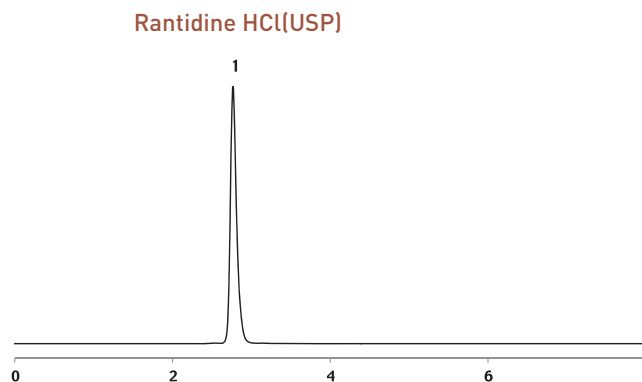
Hector M C18



Hector M C18 is the most versatile and popular reversed phase. It is extremely suitable for the validation of various analytes. It has an about 17 % carbon load and is fully end-capped. It provides high selectivity, efficiency, and a good peak shape.

Specification

- Particle size: 3, 5, 10 μm
- Pore size: 100, 120 \AA
- Bonded phase: Octadecyl Groups
- Carbon contents: 17 %
- USP Code: L1
- Usable pH range: 2-8

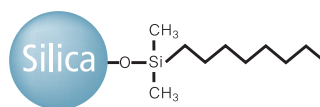


Column : Hector-M C18 5 μm
 Dimension : 250 X 4.6mm
 Mobile phase : 0.1 M Ammonium acetate aq. / MeOH = 15 / 85
 Flow rate : 1.0 ml/min
 Detection : UV 322nm
 Temperature : 35 $^{\circ}\text{C}$
 Injection Volume : 10 μL
 Sample : 1. Rantidine HCl

Product List

Particle size (μm)	Length (mm)	2.1 mm ID	3.0 mm ID	3.9 mm ID	4.6 mm ID	7.8 mm ID	10.0 mm ID	21.2 mm ID
3	50	C18-M31000521	C18-M31000530	C18-M31000539	C18-M31000546	-	C18-M310005100	-
	70	C18-M31000721	C18-M31000730	C18-M31000739	C18-M31000746	-	C18-M310007100	-
	100	C18-M31001021	C18-M31001030	C18-M31001039	C18-M31001046	-	C18-M310010100	-
	150	C18-M31001521	C18-M31001530	C18-M31001539	C18-M31001546	-	C18-M310015100	-
	250	C18-M31002521	C18-M31002530	C18-M31002539	C18-M31002546	-	C18-M310025100	-
5	50	C18-M51000521	C18-M51000530	C18-M51000539	C18-M51000546	-	C18-M510005100	C18-M510005200
	70	C18-M51000721	C18-M51000730	C18-M51000739	C18-M51000746	-	C18-M510007100	C18-M510007200
	100	C18-M51001021	C18-M51001030	C18-M51001039	C18-M51001046	-	C18-M510010100	C18-M510010200
	150	C18-M51001521	C18-M51001530	C18-M51001539	C18-M51001546	C18-M51001578	C18-M510015100	C18-M510015200
	250	C18-M51002521	C18-M51002530	C18-M51002539	C18-M51002546	C18-M51002578	C18-M510025100	C18-M510025200
10	100	-	-	-	C18-M101001046	-	C18-M1010010100	C18-M1010010200
	150	-	-	-	C18-M101001546	C18-M101001578	C18-M1010015100	C18-M1010015200
	250	-	-	-	C18-M101002546	C18-M101002578	C18-M1010025100	C18-M1010025200

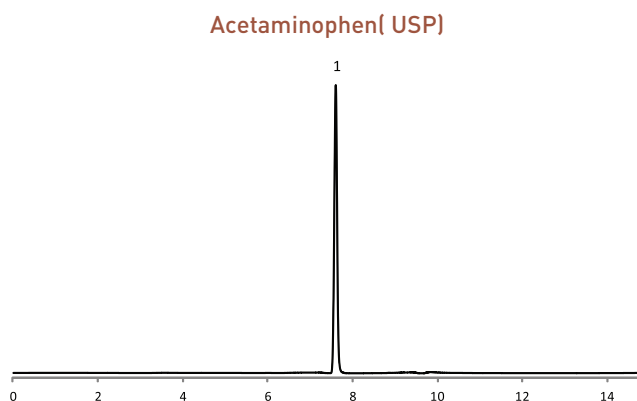
Hector M C8



Hector M C8 is packed with alkylchain-group-bonded silica particles. It has a lower carbon load than Hector M C18. We recommend Hector M C8 when the sample has a high retention time. It can be used for pharmaceutical, environmental, food, and other industrial chromatographic separations. It provides less retention and greater speed.

Specification

- Particle size: 3, 5, 10 μm
- Pore size: 100 \AA
- Bonded phase: Octyl Groups
- Carbon contents: 10 %
- USP Code: L7
- Usable pH range: 2-8



Column : Hector-M C8 3 μm Dimension : 150 X 4.6 mm
 Mobile Phase : A: 1.7 g/L of monobasic KH_2PO_4 and 1.8 g/L of
 dibasic sodium phosphate
 B: Methanol

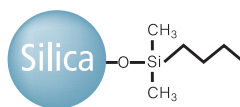
Gradient :	Time	0.0	3.0	7.0	7.1	10.0
	% B	1	1	81	1	1

Flow rate : 1.0 mL/min Detection : UV 230 nm
 Temperature : 35 $^{\circ}\text{C}$ Injection Volume : 5 μL
 Sample : 1. Acetaminophen

Product List

Particle size (μm)	Length (mm)	2.1 mm ID	3.0 mm ID	3.9 mm ID	4.6 mm ID	7.8 mm ID	10.0 mm ID	21.2 mm ID
3	50	C8-M31000521	C8-M31000530	C8-M31000539	C8-M31000546	-	-	-
	70	C8-M31000721	C8-M31000730	C8-M31000739	C8-M31000746	-	-	-
	100	C8-M31001021	C8-M31001030	C8-M31001039	C8-M31001046	-	-	-
	150	C8-M31001521	C8-M31001530	C8-M31001539	C8-M31001546	-	-	-
	250	C8-M31002521	C8-M31002530	C8-M31002539	C8-M31002546	-	-	-
5	50	C8-M51000521	C8-M51000530	C8-M51000539	C8-M51000546	-	C8-M510005100	C8-M510005200
	70	C8-M51000721	C8-M51000730	C8-M51000739	C8-M51000746	-	C8-M510007100	C8-M510007200
	100	C8-M51001021	C8-M51001030	C8-M51001039	C8-M51001046	-	C8-M510010100	C8-M510010200
	150	C8-M51001521	C8-M51001530	C8-M51001539	C8-M51001546	C8-M51001578	C8-M510015100	C8-M510015200
	250	C8-M51002521	C8-M51002530	C8-M51002539	C8-M51002546	C8-M51002578	C8-M510025100	C8-M510025200
10	100	-	-	-	C8-M101001046	-	C8-M1010010100	C8-M1010010200
	150	-	-	-	C8-M101001546	C8-M101001578	C8-M1010015100	C8-M1010015200
	250	-	-	-	C8-M101002546	C8-M101002578	C8-M1010025100	C8-M1010025200

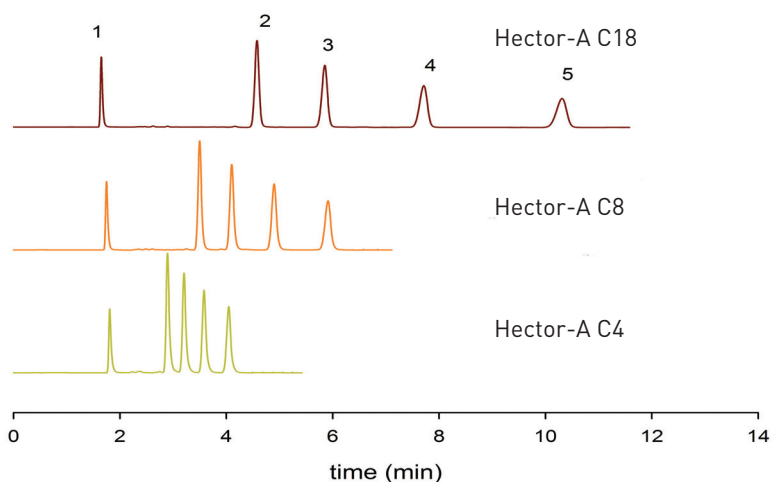
Hector M C4



Hector M C4 is packed with alkylchain-group bonded silica particles. It has a lower carbon load than Hector C18 and Hector C8. We recommend Hector M C4 when the sample has a high retention time. It can be used for pharmaceutical, environmental, food, and other industrial chromatographic separations. It provides less retention and greater speed.

Specification

- Particle size: 3, 5, 10 μm
- Pore size: 100 \AA
- Bonded phase: Butyl Groups
- Carbon contents: 3 %
- USP Code: L26
- Usable pH range: 2-8



Mobile phase : MeOH/H₂O =80/20

Flow Rate : 1.0 mL/min

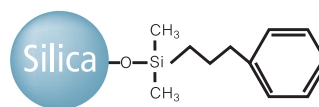
Sample : 1. Uracil

2. Ethylbenzene
3. N-Propylbenzene
4. N-Butylbenzene
5. N-Amylbenzene

Product List

Particle size (μm)	Length (mm)	2.1 mm ID	3.0 mm ID	3.9 mm ID	4.6 mm ID	7.8 mm ID	10.0 mm ID	21.2 mm ID
3	50	C4-M31000521	C4-M31000530	C4-M31000539	C4-M31000546	-	-	-
	70	C4-M31000721	C4-M31000730	C4-M31000739	C4-M31000746	-	-	-
	100	C4-M31001021	C4-M31001030	C4-M31001039	C4-M31001046	-	-	-
	150	C4-M31001521	C4-M31001530	C4-M31001539	C4-M31001546	-	-	-
	250	C4-M31002521	C4-M31002530	C4-M31002539	C4-M31002546	-	-	-
5	50	C4-M51000521	C4-M51000530	C4-M51000539	C4-M51000546	-	C4-M510005100	C4-M510005200
	70	C4-M51000721	C4-M51000730	C4-M51000739	C4-M51000746	-	C4-M510007100	C4-M510007200
	100	C4-M51001021	C4-M51001030	C4-M51001039	C4-M51001046	-	C4-M510010100	C4-M510010200
	150	C4-M51001521	C4-M51001530	C4-M51001539	C4-M51001546	C4-M51001578	C4-M510015100	C4-M510015200
	250	C4-M51002521	C4-M51002530	C4-M51002539	C4-M51002546	C4-M51002578	C4-M510025100	C4-M510025200
10	100	-	-	-	C4-M101001046	-	C4-M1010010100	C4-M1010010200
	150	-	-	-	C4-M101001546	C4-M101001578	C4-M1010015100	C4-M1010015200
	250	-	-	-	C4-M101002546	C4-M101002578	C4-M1010025100	C4-M1010025200

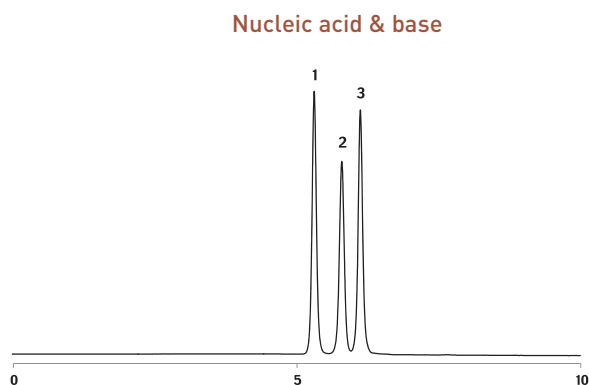
Hector M Phenyl



The Phenyl-modified stationary phase has π -electrons. The hydrophobic and π - π interactions between the stationary phase and the solute show unique separation characteristics compared with the alkyl-bonding stationary phases, such as C18, C8, and C4.

Specification

- Particle size: 3, 5, 10 μm
- Pore size: 100 Å
- Bonded phase: Phenylpropyl Groups
- Carbon contents: 10 %
- USP Code: L11
- Usable pH range: 2-8



Column : Hector-M PN 5 μm
 Dimension : 250 X 4.6mm
 Mobile phase : 10 mM KH_2PO_4 aq. / MeOH = 85 / 15
 Flow rate : 0.5ml/min
 Detection : UV 230nm
 Temperature : 30 °C
 Injection Volume : 10 μL
 Sample : 1. Cytidin 2. Cytosine 3. Adenonin

Product List

Particle size (μm)	Length (mm)	2.1 mm ID	3.0 mm ID	3.9 mm ID	4.6 mm ID	7.8 mm ID	10.0 mm ID	21.2 mm ID
3	50	PN-M31000521	PN-M31000530	PN-M31000539	PN-M31000546	-	-	-
	70	PN-M31000721	PN-M31000730	PN-M31000739	PN-M31000746	-	-	-
	100	PN-M31001021	PN-M31001030	PN-M31001039	PN-M31001046	-	-	-
	150	PN-M31001521	PN-M31001530	PN-M31001539	PN-M31001546	-	-	-
	250	PN-M31002521	PN-M31002530	PN-M31002539	PN-M31002546	-	-	-
5	50	PN-M51000521	PN-M51000530	PN-M51000539	PN-M51000546	-	PN-M510005100	PN-M510005200
	70	PN-M51000721	PN-M51000730	PN-M51000739	PN-M51000746	-	PN-M510007100	PN-M510007200
	100	PN-M51001021	PN-M51001030	PN-M51001039	PN-M51001046	-	PN-M510010100	PN-M510010200
	150	PN-M51001521	PN-M51001530	PN-M51001539	PN-M51001546	PN-M51001578	PN-M510015100	PN-M510015200
	250	PN-M51002521	PN-M51002530	PN-M51002539	PN-M51002546	PN-M51002578	PN-M510025100	PN-M510025200
10	100	-	-	-	PN-M101001046	-	PN-M1010010100	PN-M1010010200
	150	-	-	-	PN-M101001546	PN-M101001578	PN-M1010015100	PN-M1010015200
	250	-	-	-	PN-M101002546	PN-M101002578	PN-M1010025100	PN-M1010025200

Hector M Sil

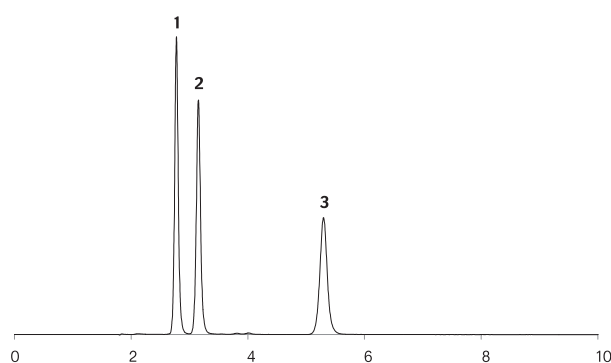


Sil stationary phase is widely used in normal phase separation. Especially, separation of position isomer and lipid-soluble compounds is effective. Hector M Sil is produced by high purity silica (99.99 % purity) and enhanced mechanical strength.

Steroid(estriol, estrone, estradiol)

Specification

- Particle size: 3, 5, 10 μm
- Pore size: 100 \AA
- USP Code: L3
- Usable pH range: 2-8

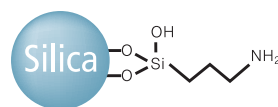


Column : Hector-M Sil $5\mu\text{m}$
 Dimension : 150 X 4.6mm
 Mobile phase : Hexane / Ethanol = 80 / 20
 Flow rate : 1.0 ml/min
 Detection : UV 230nm
 Temperature : 25 °C
 Injection Volume : 10 μL
 Sample : 1. Estrone 2. Estriol 3. Estradiol

Product List

Particle size (μm)	Length (mm)	2.1 mm ID	3.0 mm ID	3.9 mm ID	4.6 mm ID	7.8 mm ID	10.0 mm ID	21.2 mm ID
3	50	Sil-M31000521	Sil-M31000530	Sil-M31000539	Sil-M31000546	-	-	-
	70	Sil-M31000721	Sil-M31000730	Sil-M31000739	Sil-M31000746	-	-	-
	100	Sil-M31001021	Sil-M31001030	Sil-M31001039	Sil-M31001046	-	-	-
	150	Sil-M31001521	Sil-M31001530	Sil-M31001539	Sil-M31001546	-	-	-
	250	Sil-M31002521	Sil-M31002530	Sil-M31002539	Sil-M31002546	-	-	-
5	50	Sil-M51000521	Sil-M51000530	Sil-M51000539	Sil-M51000546	-	Sil-M510005100	Sil-M510005200
	70	Sil-M51000721	Sil-M51000730	Sil-M51000739	Sil-M51000746	-	Sil-M510007100	Sil-M510007200
	100	Sil-M51001021	Sil-M51001030	Sil-M51001039	Sil-M51001046	-	Sil-M510010100	Sil-M510010200
	150	Sil-M51001521	Sil-M51001530	Sil-M51001539	Sil-M51001546	Sil-M51001578	Sil-M510015100	Sil-M510015200
	250	Sil-M51002521	Sil-M51002530	Sil-M51002539	Sil-M51002546	Sil-M51002578	Sil-M510025100	Sil-M510025200
10	100	-	-	-	Sil-M101001046	-	Sil-M1010010100	Sil-M1010010200
	150	-	-	-	Sil-M101001546	Sil-M101001578	Sil-M1010015100	Sil-M1010015200
	250	-	-	-	Sil-M101002546	Sil-M101002578	Sil-M1010025100	Sil-M1010025200

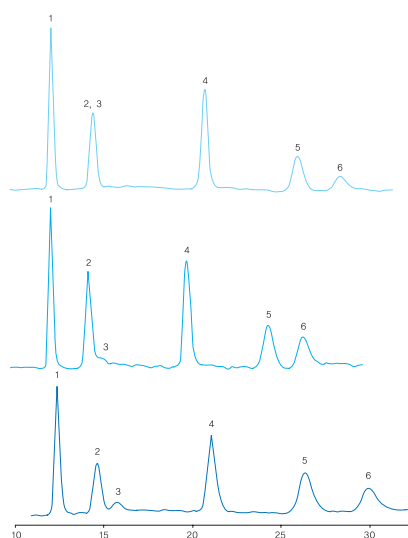
Hector M NH2



Hector M NH₂-modified stationary phase can be used in the HILIC, IEC, and NP modes. The HILIC mode is for the separation of polar compounds, such as carbohydrates. In the IEC mode, the NH₂ phase works as a weak anion exchanger in aqueous buffers at a low pH. In the NP mode, it is useful for separating basic compounds because the plus charge of the surface prevents ionic interaction with basic compounds. Hector M NH₂ 51202546 provides good separations of a variety of carbohydrates, especially monosaccharides.

Specification

- Particle size: 3, 5, 10 μm
- Pore size: 100, 120 Å
- Bonded phase: Aminopropyl Groups
- Carbon contents: 4 %
- USP Code: L8
- Usable pH range: 2-8



Brand A column

Hector M NH₂
51002546Hector M NH₂
51202546

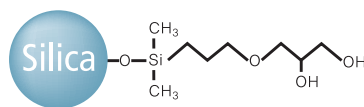
Mobile Phase: 75 % ACN
Flow rate: 0.8 mL/min
Detection: RID
Temperature: 25 °C
Injection Volume: 20 μL

Sample : 1. Fructose 2. Glucose
3. Galactose 4. Sucrose
5. Maltose 6. Lactose

Product List

Particle size (μm)	Length (mm)	2.1 mm ID	3.0 mm ID	3.9 mm ID	4.6 mm ID	7.8 mm ID	10.0 mm ID	21.2 mm ID
3	50	NH2-M31000521	NH2-M31000530	NH2-M31000539	NH2-M31000546	-	-	-
	70	NH2-M31000721	NH2-M31000730	NH2-M31000739	NH2-M31000746	-	-	-
	100	NH2-M31001021	NH2-M31001030	NH2-M31001039	NH2-M31001046	-	-	-
	150	NH2-M31001521	NH2-M31001530	NH2-M31001539	NH2-M31001546	-	-	-
	250	NH2-M31002521	NH2-M31002530	NH2-M31002539	NH2-M31002546	-	-	-
5	50	NH2-M51000521	NH2-M51000530	NH2-M51000539	NH2-M51000546	-	NH2-M510005100	NH2-M510005200
	70	NH2-M51000721	NH2-M51000730	NH2-M51000739	NH2-M51000746	-	NH2-M510007100	NH2-M510007200
	100	NH2-M51001021	NH2-M51001030	NH2-M51001039	NH2-M51001046	-	NH2-M510010100	NH2-M510010200
	150	NH2-M51001521	NH2-M51001530	NH2-M51001539	NH2-M51001546	NH2-M51001578	NH2-M510015100	NH2-M510015200
	250	NH2-M51002521	NH2-M51002530	NH2-M51002539	NH2-M51002546	NH2-M51002578	NH2-M510025100	NH2-M510025200
10	100	-	-	-	NH2-M101001046	-	NH2-M1010010100	NH2-M1010010200
	150	-	-	-	NH2-M101001546	NH2-M101001578	NH2-M1010015100	NH2-M1010015200
	250	-	-	-	NH2-M101002546	NH2-M101002578	NH2-M1010025100	NH2-M1010025200

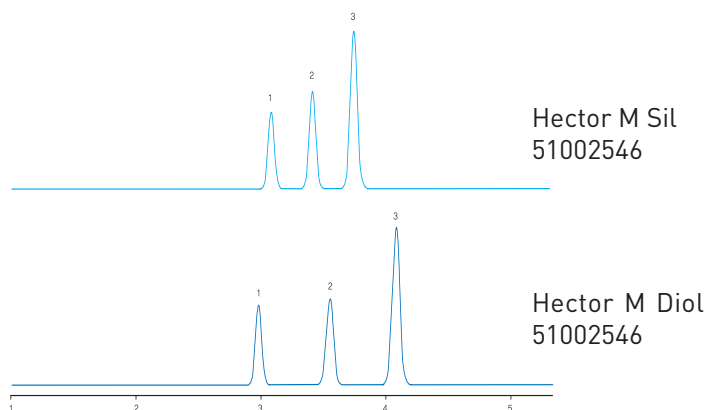
Hector M Diol



The Diol-modified normal phase has a neutral hydroxyl group and is thus a more versatile alternative to silica. The hydrogen bonding on the diol layer is not as strong as with that on silanol on a bare silica surface, and shows improved reproducibility. The diol matrix is appropriate for the separation of neutral, acidic, and basic compounds.

Specification

- Particle size: 3, 5, 10 μm
- Pore size: 100 \AA
- Bonded phase: Diol Groups
- Carbon contents: 4 %
- USP Code: L20
- Usable pH range: 2-8



Mobile Phase: Hexane / IPA = 90 / 10

Flow rate: 1 mL/min

Detection: UV 254 nm

Temperature: 25 °C

Injection Volume: 1 μL

Sample : 1. Ethylbenzene

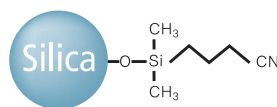
2. 2-Chloro-6-nitrotoluene

3. Nitrobenzene

Product List

Particle size (μm)	Length (mm)	2.1 mm ID	3.0 mm ID	3.9 mm ID	4.6 mm ID	7.8 mm ID	10.0 mm ID	21.2 mm ID
3	50	Diol-M31000521	Diol-M31000530	Diol-M31000539	Diol-M31000546	-	-	-
	70	Diol-M31000721	Diol-M31000730	Diol-M31000739	Diol-M31000746	-	-	-
	100	Diol-M31001021	Diol-M31001030	Diol-M31001039	Diol-M31001046	-	-	-
	150	Diol-M31001521	Diol-M31001530	Diol-M31001539	Diol-M31001546	-	-	-
	250	Diol-M31002521	Diol-M31002530	Diol-M31002539	Diol-M31002546	-	-	-
5	50	Diol-M51000521	Diol-M51000530	Diol-M51000539	Diol-M51000546	-	Diol-M510005100	Diol-M510005200
	70	Diol-M51000721	Diol-M51000730	Diol-M51000739	Diol-M51000746	-	Diol-M510007100	Diol-M510007200
	100	Diol-M51001021	Diol-M51001030	Diol-M51001039	Diol-M51001046	-	Diol-M510010100	Diol-M510010200
	150	Diol-M51001521	Diol-M51001530	Diol-M51001539	Diol-M51001546	Diol-M51001578	Diol-M510015100	Diol-M510015200
	250	Diol-M51002521	Diol-M51002530	Diol-M51002539	Diol-M51002546	Diol-M51002578	Diol-M510025100	Diol-M510025200
10	100	-	-	-	Diol-M101001046	-	Diol-M1010010100	Diol-M1010010200
	150	-	-	-	Diol-M101001546	Diol-M101001578	Diol-M1010015100	Diol-M1010015200
	250	-	-	-	Diol-M101002546	Diol-M101002578	Diol-M1010025100	Diol-M1010025200

Hector M CN



The Nitrile-bonded phase is the most polar and the least retentive mode. In the case of the RP mode, the CN-modified phase is for the separation of extremely hydrophobic compounds. In the case of the NP mode, the CN-modified phase shows more uniform surface activity and often increased resistance to possible dissolution compared to bare silica.

Specification

- Particle size: 3, 5, 10 μm
- Pore size: 100 \AA
- Bonded phase: Cyanopropyl Groups
- Carbon contents: 6-7 %
- USP Code: L10
- Usable pH range: 2-8

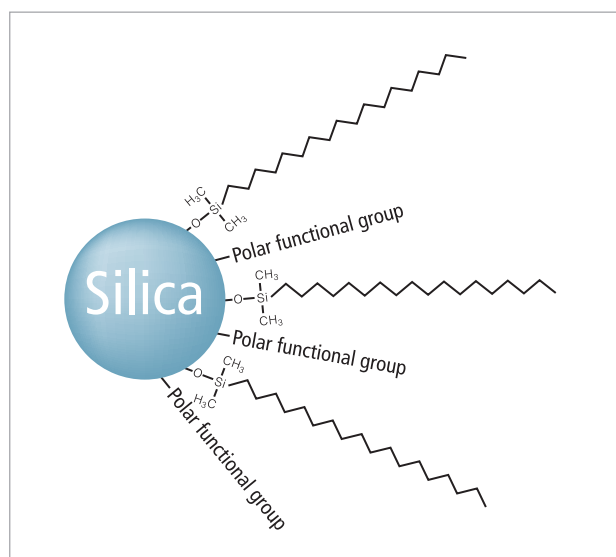
Product List

Particle size (μm)	Length (mm)	2.1 mm ID	3.0 mm ID	3.9 mm ID	4.6 mm ID	7.8 mm ID	10.0 mm ID	21.2 mm ID
3	50	CN-M31000521	CN-M31000530	CN-M31000539	CN-M31000546	-	-	-
	70	CN-M31000721	CN-M31000730	CN-M31000739	CN-M31000746	-	-	-
	100	CN-M31001021	CN-M31001030	CN-M31001039	CN-M31001046	-	-	-
	150	CN-M31001521	CN-M31001530	CN-M31001539	CN-M31001546	-	-	-
	250	CN-M31002521	CN-M31002530	CN-M31002539	CN-M31002546	-	-	-
5	50	CN-M51000521	CN-M51000530	CN-M51000539	CN-M51000546	-	CN-M510005100	CN-M510005200
	70	CN-M51000721	CN-M51000730	CN-M51000739	CN-M51000746	-	CN-M510007100	CN-M510007200
	100	CN-M51001021	CN-M51001030	CN-M51001039	CN-M51001046	-	CN-M510010100	CN-M510010200
	150	CN-M51001521	CN-M51001530	CN-M51001539	CN-M51001546	CN-M51001578	CN-M510015100	CN-M510015200
	250	CN-M51002521	CN-M51002530	CN-M51002539	CN-M51002546	CN-M51002578	CN-M510025100	CN-M510025200
10	100	-	-	-	CN-M101001046	-	CN-M1010010100	CN-M1010010200
	150	-	-	-	CN-M101001546	CN-M101001578	CN-M1010015100	CN-M1010015200
	250	-	-	-	CN-M101002546	CN-M101002578	CN-M1010025100	CN-M1010025200

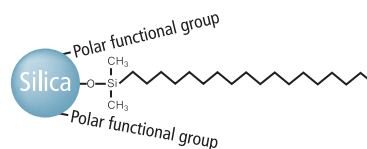
2-2. Hector A: Usable under 100 % aqueous condition

Hector A's packing surface allows the use of 100 % water as an eluent, enabling good solvation between the mobile and hydrophilic surfaces. The Hector A phases can be used for the separation of hydrophobic compounds without a phenomenon commonly known as "phase collapse". Hector A packing introduces high-purity SiO_2 >99.99 %, which points to a total metal content of <100 ppm. As such, it provides a good peak shape and reproducibility.

- Differentiated Phases: C18, C8
- Specification: Spherical silica, Monomerically bonded, End capped, 100 Å pore size
- Format: Analytical, Semi-prep



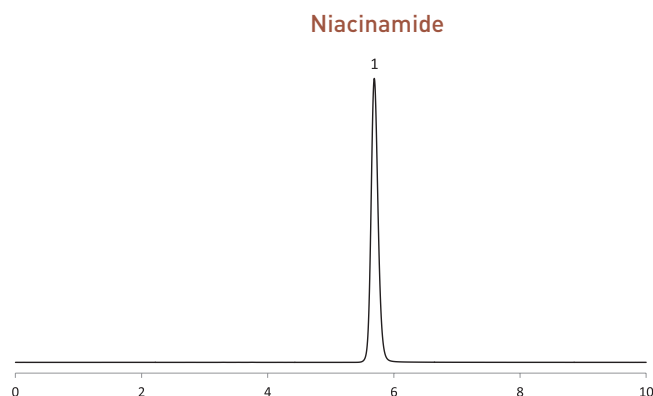
Hector A C18



The Hector A C18 phase shows similar selectivity as the conventional C18 phases when used for the separation of hydrophobic compounds with typical reversed-phase mobile phases. It is thus suitable for use as a unique universal C18 column.

Specification

- Particle size: 3, 5, 10 μm
- Pore size: 100 \AA
- Bonded phase: Octadecyl Groups
- Carbon contents: 12-13 %
- USP Code: L1
- Usable pH range: 2-8

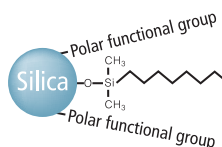


Column : Hector-A C18 5 μm
 Dimension : 250 X 4.6mm
 Mobile phase : 0.05 M KH_2PO_4 monobasic(pH 7.0 with Sodium hydroxide) / MeOH = 75 / 25
 Flow rate : 1ml/min
 Detection : UV 263nm
 Temperature : 40 $^\circ\text{C}$
 Injection Volume : 10 μL
 Sample : 1. Niacinamide

Product List

Particle size (μm)	Length (mm)	2.1 mm ID	3.0 mm ID	3.9 mm ID	4.6 mm ID	7.8 mm ID	10.0 mm ID	21.2 mm ID
3	50	C18-A31000521	C18-A31000530	C18-A31000539	C18-A31000546	-	-	-
	70	C18-A31000721	C18-A31000730	C18-A31000739	C18-A31000746	-	-	-
	100	C18-A31001021	C18-A31001030	C18-A31001039	C18-A31001046	-	-	-
	150	C18-A31001521	C18-A31001530	C18-A31001539	C18-A31001546	-	-	-
	250	C18-A31002521	C18-A31002530	C18-A31002539	C18-A31002546	-	-	-
5	50	C18-A51000521	C18-A51000530	C18-A51000539	C18-A51000546	-	C18-A510005100	C18-A510005200
	70	C18-A51000721	C18-A51000730	C18-A51000739	C18-A51000746	-	C18-A510007100	C18-A510007200
	100	C18-A51001021	C18-A51001030	C18-A51001039	C18-A51001046	-	C18-A510010100	C18-A510010200
	150	C18-A51001521	C18-A51001530	C18-A51001539	C18-A51001546	C18-A51001578	C18-A510015100	C18-A510015200
	250	C18-A51002521	C18-A51002530	C18-A51002539	C18-A51002546	C18-A51002578	C18-A510025100	C18-A510025200
10	100	-	-	-	C18-A101001046	-	C18-A1010010100	C18-A1010010200
	150	-	-	-	C18-A101001546	C18-A101001578	C18-A1010015100	C18-A1010015200
	250	-	-	-	C18-A101002546	C18-A101002578	C18-A1010025100	C18-A1010025200

Hector A C8



Besides C18, universal C8 is the material of choice for investigation. Hector A C8 offers a “hydrophilic” alternative for the regular C8 material.

Specification

- Particle size: 3, 5, 10 μm
- Pore size: 100 \AA
- Bonded phase: Octyl Groups
- Carbon contents: 8 %
- USP Code: L7
- Usable pH range: 2-8

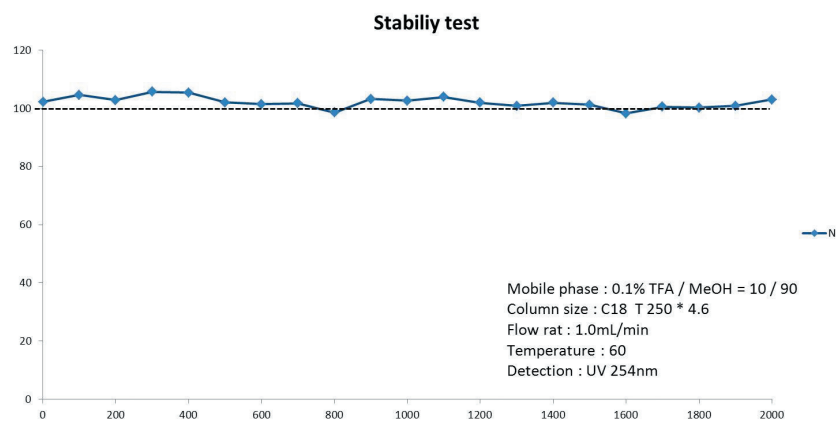
Product List

Particle size (μm)	Length (mm)	2.1 mm ID	3.0 mm ID	3.9 mm ID	4.6 mm ID	7.8 mm ID	10.0 mm ID	21.2 mm ID
3	50	C8-A31000521	C8-A31000530	C8-A31000539	C8-A31000546	-	-	-
	70	C8-A31000721	C8-A31000730	C8-A31000739	C8-A31000746	-	-	-
	100	C8-A31001021	C8-A31001030	C8-A31001039	C8-A31001046	-	-	-
	150	C8-A31001521	C8-A31001530	C8-A31001539	C8-A31001546	-	-	-
	250	C8-A31002521	C8-A31002530	C8-A31002539	C8-A31002546	-	-	-
5	50	C8-A51000521	C8-A51000530	C8-A51000539	C8-A51000546	-	C8-A510005100	C8-A510005200
	70	C8-A51000721	C8-A51000730	C8-A51000739	C8-A51000746	-	C8-A510007100	C8-A510007200
	100	C8-A51001021	C8-A51001030	C8-A51001039	C8-A51001046	-	C8-A510010100	C8-A510010200
	150	C8-A51001521	C8-A51001530	C8-A51001539	C8-A51001546	C8-A51001578	C8-A510015100	C8-A510015200
	250	C8-A51002521	C8-A51002530	C8-A51002539	C8-A51002546	C8-A51002578	C8-A510025100	C8-A510025200
10	100	-	-	-	C8-A101001046	-	C8-A1010010100	C8-A1010010200
	150	-	-	-	C8-A101001546	C8-A101001578	C8-A1010015100	C8-A1010015200
	250	-	-	-	C8-A101002546	C8-A101002578	C8-A1010025100	C8-A1010025200

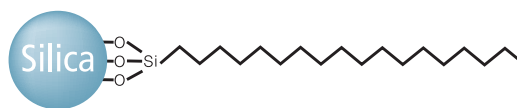
2-3. Hector T: Enhanced durability

Hector T has a higher acid and base durability than monofunctional C18. The wide range of pH conditions supports the easy optimization of separation conditions. In addition, the tailing factor of the basic compounds has been improved. The polymeric-bonded phase from trifunctional silane may be more stable than the monomeric phases at a low pH.

- Differentiated Phases: C18
- Specification: Spherical silica, Trifunctional bonded, End capped, 100 Å pore size
- Format: Analytical, Semi-prep



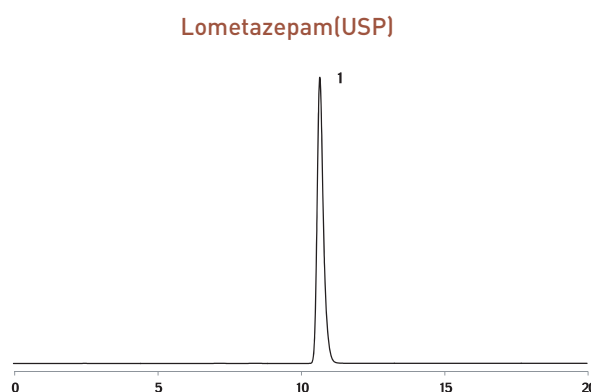
Hector T C18



Hector T C18 phase shows similar selectivity as the conventional C18 phases when used for the separation of hydrophobic compounds with typical reversed-phase mobile phases, but it has a fast analysis time. Hector T phase is available in trifunctional silica form. If the pH will be adjusted to acid values, it will be critical to use trifunctional silica to prevent the hydrolysis of the hydrocarbon group from the surface of Hector T packings. This phase extends the stability, robustness, and reproducibility.

Specification

- Particle size: 3, 5, 10 μm
- Pore size: 100 \AA
- Bonded phase: Octadecyl Groups
- Carbon contents: 19 %
- USP Code: L1
- Usable pH range: 2-8



Column : Hector-T C18 5 μm
 Dimension : 250 X 4.6mm
 Mobile phase : Water / ACN / Acetic acid = 60 / 40 / 0.4
 Flow rate : 1.0 ml/min
 Detection : UV 254nm
 Temperature : 30 °C
 Injection Volume : 10 μL
 Sample : 1. Lometazepam

Product List

Particle size (μm)	Length (mm)	2.1 mm ID	3.0 mm ID	3.9 mm ID	4.6 mm ID	7.8 mm ID	10.0 mm ID	21.2 mm ID
3	50	Sil-M31000521	Sil-M31000530	Sil-M31000539	Sil-M31000546	-	-	-
	70	Sil-M31000721	Sil-M31000730	Sil-M31000739	Sil-M31000746	-	-	-
	100	Sil-M31001021	Sil-M31001030	Sil-M31001039	Sil-M31001046	-	-	-
	150	Sil-M31001521	Sil-M31001530	Sil-M31001539	Sil-M31001546	-	-	-
	250	Sil-M31002521	Sil-M31002530	Sil-M31002539	Sil-M31002546	-	-	-
5	50	Sil-M51000521	Sil-M51000530	Sil-M51000539	Sil-M51000546	-	Sil-M510005100	Sil-M510005200
	70	Sil-M51000721	Sil-M51000730	Sil-M51000739	Sil-M51000746	-	Sil-M510007100	Sil-M510007200
	100	Sil-M51001021	Sil-M51001030	Sil-M51001039	Sil-M51001046	-	Sil-M510010100	Sil-M510010200
	150	Sil-M51001521	Sil-M51001530	Sil-M51001539	Sil-M51001546	Sil-M51001578	Sil-M510015100	Sil-M510015200
	250	Sil-M51002521	Sil-M51002530	Sil-M51002539	Sil-M51002546	Sil-M51002578	Sil-M510025100	Sil-M510025200
10	100	-	-	-	Sil-M101001046	-	Sil-M1010010100	Sil-M1010010200
	150	-	-	-	Sil-M101001546	Sil-M101001578	Sil-M1010015100	Sil-M1010015200
	250	-	-	-	Sil-M101002546	Sil-M101002578	Sil-M1010025100	Sil-M1010025200

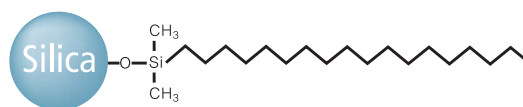
2-4. Hector W: Wide pore for compounds with large molecule

Hector W has 300 Å wide-pore silica with C18, C8, C4 and NH₂ derivatizations. This wide-pore silica is for the separation of peptides, proteins, and oligonucleotides. The derivatization type is selected by target compounds property.

- Differentiated Phases: C18, C8, C4, NH₂
- Specification: Spherical silica, Monomerically bonded, End capped, 300 Å pore size
- Format: Analytical, Semi-prep



Hector W C18

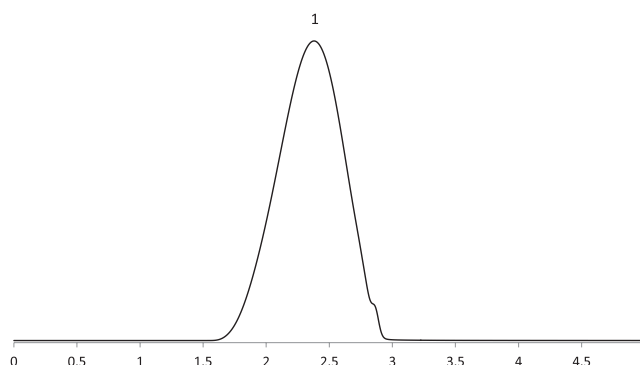


Hector W C18 is designed for the separation of biological compounds, such as proteins, peptides, nucleotides, and oligosaccharides. 300 Å pore size affects analysis and provides high efficiency and a good peak shape. It is produced with the use of high-purity silica and is fully end-capped. It is available in 3, 5, and 10 µm particle sizes and in various column sizes. The advanced total end-capping system that is used in its production makes this material excellent for analyzing basic substances and some metal complexes, where any trace of residual silanol sites will cause peak tailing.

Specification

- Particle size: 3, 5, 10 µm
- Pore size: 300 Å
- Bonded phase: Octadecyl Groups
- Carbon contents: 7 %
- USP Code: L1
- Usable pH range: 2-8

Polysilicon-15

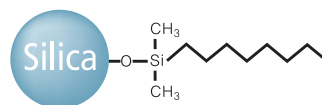


Column : Hector-W C18 5 µm
 Dimension : 250 X 4.6mm
 Mobile phase : THF
 Flow rate : 1.0 ml/min
 Detection : UV 310nm
 Temperature : 40 °C
 Injection Volume : 10µL
 Sample : 1. Polysilicon-15

Product List

Particle size (µm)	Length (mm)	2.1 mm ID	3.0 mm ID	3.9 mm ID	4.6 mm ID	7.8 mm ID	10.0 mm ID	21.2 mm ID
3	50	C18-W33000521	C18-W33000530	C18-W33000539	C18-W33000546	-	-	-
	70	C18-W33000721	C18-W33000730	C18-W33000739	C18-W33000746	-	-	-
	100	C18-W33001021	C18-W33001030	C18-W33001039	C18-W33001046	-	-	-
	150	C18-W33001521	C18-W33001530	C18-W33001539	C18-W33001546	-	-	-
	250	C18-W33002521	C18-W33002530	C18-W33002539	C18-W33002546	-	-	-
5	50	C18-W53000521	C18-W53000530	C18-W53000539	C18-W53000546	-	C18-W530005100	C18-W530005200
	70	C18-W53000721	C18-W53000730	C18-W53000739	C18-W53000746	-	C18-W530007100	C18-W530007200
	100	C18-W53001021	C18-W53001030	C18-W53001039	C18-W53001046	-	C18-W530010100	C18-W530010200
	150	C18-W53001521	C18-W53001530	C18-W53001539	C18-W53001546	C18-W51001578	C18-W530015100	C18-W530015200
	250	C18-W53002521	C18-W53002530	C18-W53002539	C18-W53002546	C18-W51002578	C18-W530025100	C18-W530025200
10	100	-	-	-	C18-W103001046	-	C18-W1030010100	C18-W1030010200
	150	-	-	-	C18-W103001546	C18-W101001578	C18-W1030015100	C18-W1030015200
	250	-	-	-	C18-W103002546	C18-W101002578	C18-W1030025100	C18-W1030025200

Hector W C8



As it contains highly hydrophobic compounds, Hector W C8 is a good alternative to Hector W C18 when less retention is desired.

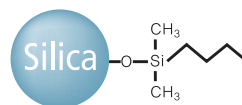
Specification

- Particle size: 3, 5, 10 μm
- Pore size: 300 \AA
- Bonded phase: Octyl Groups
- Carbon contents: 4 %
- USP Code: L7
- Usable pH range: 2-8

Product List

Particle size (μm)	Length (mm)	2.1 mm ID	3.0 mm ID	3.9 mm ID	4.6 mm ID	7.8 mm ID	10.0 mm ID	21.2 mm ID
3	50	C8-W33000521	C8-W33000530	C8-W33000539	C8-W33000546	-	-	-
	70	C8-W33000721	C8-W33000730	C8-W33000739	C8-W33000746	-	-	-
	100	C8-W33001021	C8-W33001030	C8-W33001039	C8-W33001046	-	-	-
	150	C8-W33001521	C8-W33001530	C8-W33001539	C8-W33001546	-	-	-
	250	C8-W33002521	C8-W33002530	C8-W33002539	C8-W33002546	-	-	-
5	50	C8-W53000521	C8-W53000530	C8-W53000539	C8-W53000546	-	C8-W530005100	C8-W530005200
	70	C8-W53000721	C8-W53000730	C8-W53000739	C8-W53000746	-	C8-W530007100	C8-W530007200
	100	C8-W53001021	C8-W53001030	C8-W53001039	C8-W53001046	-	C8-W530010100	C8-W530010200
	150	C8-W53001521	C8-W53001530	C8-W53001539	C8-W53001546	C8-W51001578	C8-W530015100	C8-W530015200
	250	C8-W53002521	C8-W53002530	C8-W53002539	C8-W53002546	C8-W51002578	C8-W530025100	C8-W530025200
10	100	-	-	-	C8-W103001046	-	C8-W1030010100	C8-W1030010200
	150	-	-	-	C8-W103001546	C8-W101001578	C8-W1030015100	C8-W1030015200
	250	-	-	-	C8-W103002546	C8-W101002578	C8-W1030025100	C8-W1030025200

Hector W C4



As it contains highly hydrophobic compounds, Hector W C4 is a good alternative to hector W C18 or C8 when less retention is desired.

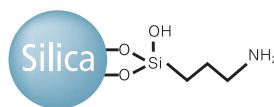
Specification

- Particle size: 3, 5, 10 μm
- Pore size: 300 \AA
- Bonded phase: Butyl Groups
- Carbon contents: 3 %
- USP Code: L26
- Usable pH range: 2-8

Product List

Particle size (μm)	Length (mm)	2.1 mm ID	3.0 mm ID	3.9 mm ID	4.6 mm ID	7.8 mm ID	10.0 mm ID	21.2 mm ID
3	50	C4-W33000521	C4-W33000530	C4-W33000539	C4-W33000546	-	-	-
	70	C4-W33000721	C4-W33000730	C4-W33000739	C4-W33000746	-	-	-
	100	C4-W33001021	C4-W33001030	C4-W33001039	C4-W33001046	-	-	-
	150	C4-W33001521	C4-W33001530	C4-W33001539	C4-W33001546	-	-	-
	250	C4-W33002521	C4-W33002530	C4-W33002539	C4-W33002546	-	-	-
5	50	C4-W53000521	C4-W53000530	C4-W53000539	C4-W53000546	-	C4-W530005100	C4-W530005200
	70	C4-W53000721	C4-W53000730	C4-W53000739	C4-W53000746	-	C4-W530007100	C4-W530007200
	100	C4-W53001021	C4-W53001030	C4-W53001039	C4-W53001046	-	C4-W530010100	C4-W530010200
	150	C4-W53001521	C4-W53001530	C4-W53001539	C4-W53001546	C4-W51001578	C4-W530015100	C4-W530015200
	250	C4-W53002521	C4-W53002530	C4-W53002539	C4-W53002546	C4-W51002578	C4-W530025100	C4-W530025200
10	100	-	-	-	C4-W103001046	-	C4-W1030010100	C4-W1030010200
	150	-	-	-	C4-W103001546	C4-W101001578	C4-W1030015100	C4-W1030015200
	250	-	-	-	C4-W103002546	C4-W101002578	C4-W1030025100	C4-W1030025200

Hector W NH2



NH2 phase is for reversed- or normal-phase separation. It is excellent for the reversed-phase analysis of sugars, sugar alcohols, and anionic compounds, or for hydrogen-bonding compounds, under normal-phase conditions.

Specification

- Particle size: 3, 5, 10 μm
- Pore size: 300 \AA
- Bonded phase: Aminopropyl Groups
- Carbon contents: 3 %
- USP Code: L8
- Usable pH range: 2-8

Product List

Particle size (μm)	Length (mm)	2.1 mm ID	3.0 mm ID	3.9 mm ID	4.6 mm ID	7.8 mm ID	10.0 mm ID	21.2 mm ID
3	50	NH2-W33000521	NH2-W 33000530	NH2-W 33000539	NH2-W 33000546	-	-	-
	70	NH2-W33000721	NH2-W 33000730	NH2-W 33000739	NH2-W 33000746	-	-	-
	100	NH2-W33001021	NH2-W 33001030	NH2-W 33001039	NH2-W 33001046	-	-	-
	150	NH2-W33001521	NH2-W 33001530	NH2-W 33001539	NH2-W 33001546	-	-	-
	250	NH2-W33002521	NH2-W 33002530	NH2-W 33002539	NH2-W 33002546	-	-	-
5	50	NH2-W53000521	NH2-W53000530	NH2-W53000539	NH2-W53000546	-	NH2-W530005100	NH2-W530005200
	70	NH2-W53000721	NH2-W53000730	NH2-W53000739	NH2-W53000746	-	NH2-W530007100	NH2-W530007200
	100	NH2-W53001021	NH2-W53001030	NH2-W53001039	NH2-W53001046	-	NH2-W530010100	NH2-W530010200
	150	NH2-W53001521	NH2-W53001530	NH2-W53001539	NH2-W53001546	NH2-W51001578	NH2-W530015100	NH2-W530015200
	250	NH2-W53002521	NH2-W53002530	NH2-W53002539	NH2-W53002546	NH2-W51002578	NH2-W530025100	NH2-W530025200
10	100	-	-	-	NH2-W103001046	-	NH2-W1030010100	NH2-W1030010200
	150	-	-	-	NH2-W103001546	NH2-W101001578	NH2-W1030015100	NH2-W1030015200
	250	-	-	-	NH2-W103002546	NH2-W101002578	NH2-W1030025100	NH2-W1030025200

2-5. Hector U: Designed to be compatible with all commercially available UHPLC systems

UHPLC substantially reduces time and cost-per-sample analysis, while improving the quality of decision making results. Hector U enables chromatographers to benefit the separation efficiency improvements, thereby improving their business' productivity and profitability.

Specification

- Particle size: 1.6, 1.8, 2 μm
- Pore size: 100 Å
- Bonded phase: Octadecyl Groups
- Carbon contents: 19 %
- USP Code: L1
- Usable pH range: 2-8

Product List

Particle size (μm)	I.D. (mm)	50 mm	75 mm	100 mm	120 mm	150 mm
1.6 1.8 2	2.1	C18-U21000521	C18-U21000721	C18-U21001021	C18-U21001221	C18-U21001521



2-6. Hector ACD: Dedicated for separation of acidic compounds

Liquid chromatography has been widely used for the purification of organic compounds. Especially, normal-phase chromatography using nonpolar solvents such as hexane and ethyl acetate has been applied due to the high solubility of its compounds and as it can be easily handled after treatment. There is separation difficulty with silica gel, however, depending on the characteristics of the compounds. Although adaptable media have been developed for compounds that have separation difficulty, there are no proper media for separating acid compounds with the carboxyl group, etc. Hector ACD supplies a superior separation method for acidic compounds by introducing COOH and SO₃H bonds on the silica surface (patent applied). This acid silica has been placed on the market for the separation of problematic compounds.

Normal-phase silica grades

In the case of the normal-phase separation of organic compounds, it is necessary to select the proper media based on their characteristics. Neutral compounds are well separated by the contemporary silica gel. NH₂ and Diol silica are used for the separation of basic compounds. Additionally, "ACD silica" can be applied to acid compounds.

COOH silica: For the separation of ordinary acid compounds, but cannot be used for the separation of strong acid compounds

SO₃H: For the separation of strong acid compounds. Please pay attention to the decomposition of the compounds due to the strong acid characteristics.

- Differentiated Phases: WCX(Weak Cation Exchange), SCX(Strong Cation Exchange)
- Specification: Spherical silica, Monomerically bonded, End capped, 100 Å pore size
- Format: Analytical, Semi-prep



Hector ACD WCX



To separate acidic compounds using normal-phase bare silica gel, the addition of acid to the solution is necessary. There is no problem with the use of a pH buffer as an agent in the case of analytical separation, but when performing preparative separation, the pH-buffering agent must be removed later in the process. As Hector ACD WCX with an “immobilized acid functional group” works just as well as a buffer, however, there is no need to add a TFA buffer.

Specification

- Particle size: 3, 5, 10 μm
- Pore size: 100 \AA
- Bonded phase: Acid Functional Groups
- Carbon contents: 6-7 %
- Usable pH range: 2-8

Product List

Particle size (μm)	Length (mm)	2.1 mm ID	3.0 mm ID	3.9 mm ID	4.6 mm ID	7.8 mm ID	10.0 mm ID	21.2 mm ID
3	50	WCX-31000521	WCX-31000530	WCX-31000539	WCX-31000546	-	-	-
	70	WCX-31000721	WCX-31000730	WCX-31000739	WCX-31000746	-	-	-
	100	WCX-31001021	WCX-31001030	WCX-31001039	WCX-31001046	-	-	-
	150	WCX-31001521	WCX-31001530	WCX-31001539	WCX-31001546	-	-	-
	250	WCX-31002521	WCX-31002530	WCX-31002539	WCX-31002546	-	-	-
5	50	WCX-51000521	WCX-51000530	WCX-51000539	WCX-51000546	-	WCX-510005100	WCX-510005200
	70	WCX-51000721	WCX-51000730	WCX-51000739	WCX-51000746	-	WCX-510007100	WCX-510007200
	100	WCX-51001021	WCX-51001030	WCX-51001039	WCX-51001046	-	WCX-510010100	WCX-510010200
	150	WCX-51001521	WCX-51001530	WCX-51001539	WCX-51001546	WCX-51001578	WCX-510015100	WCX-510015200
	250	WCX-51002521	WCX-51002530	WCX-51002539	WCX-51002546	WCX-51002578	WCX-510025100	WCX-510025200
10	100	-	-	-	WCX-101001046	-	WCX-1010010100	WCX-1010010200
	150	-	-	-	WCX-101001546	WCX-101001578	WCX-1010015100	WCX-1010015200
	250	-	-	-	WCX-101002546	WCX-101002578	WCX-1010025100	WCX-1010025200

Hector ACD SCX



For the separation of strong acid compounds. Please pay attention to the decomposition of the compounds due to the strong acid characteristics.

Specification

- Particle size: 3, 5, 10 μm
- Pore size: 100 \AA
- Bonded phase: Acid Functional Groups
- Carbon contents: 5 %
- USP Code: L9
- Usable pH range: 2-8

Product List

Particle size (μm)	Length (mm)	2.1 mm ID	3.0 mm ID	3.9 mm ID	4.6 mm ID	7.8 mm ID	10.0 mm ID	21.2 mm ID
3	50	SCX-31000521	SCX-31000530	SCX-31000539	SCX-31000546	-	-	-
	70	SCX-31000721	SCX-31000730	SCX-31000739	SCX-31000746	-	-	-
	100	SCX-31001021	SCX-31001030	SCX-31001039	SCX-31001046	-	-	-
	150	SCX-31001521	SCX-31001530	SCX-31001539	SCX-31001546	-	-	-
	250	SCX-31002521	SCX-31002530	SCX-31002539	SCX-31002546	-	-	-
5	50	SCX-51000521	SCX-51000530	SCX-51000539	SCX-51000546	-	SCX-510005100	SCX-510005200
	70	SCX-51000721	SCX-51000730	SCX-51000739	SCX-51000746	-	SCX-510007100	SCX-510007200
	100	SCX-51001021	SCX-51001030	SCX-51001039	SCX-51001046	-	SCX-510010100	SCX-510010200
	150	SCX-51001521	SCX-51001530	SCX-51001539	SCX-51001546	SCX-51001578	SCX-510015100	SCX-510015200
	250	SCX-51002521	SCX-51002530	SCX-51002539	SCX-51002546	SCX-51002578	SCX-510025100	SCX-510025200
10	100	-	-	-	SCX-101001046	-	SCX-1010010100	SCX-1010010200
	150	-	-	-	SCX-101001546	SCX-101001578	SCX-1010015100	SCX-1010015200
	250	-	-	-	SCX-101002546	SCX-101002578	SCX-1010025100	SCX-1010025200