



HPLC and UHPLC Columns

- Comprehensive range of high density bonded phases producing robust materials
- Wide range of selectivities utilising bonded phases from C8, C18, C18 Acid/Base Deactivated and C18 Polar phases to Silica HILIC and Cyano
- Unique selectivities of Phenyl Hexyl and Penta Fluoro Phenyl
- Low bleed Penta Fluoro Phenyl and mass spec optimised C18
- 300Å C4 for peptides and proteins

Kinesis has developed a range of TELOS® HPLC and UHPLC Columns. Expertise in high purity silica selection, surface modification, high density bonding technology and column packing technology has enabled Kinesis to produce high quality materials which encompass a vast range in selectivities. TELOS HPLC and UHPLC Columns provide superior reliability, reproducibility and performance, with excellent selectivity.

TELOS HPLC & UHPLC Columns are available packed with a variety of standard and wide pore materials, and optimum column geometries for 1.8, 3 and 5µm particle sizes.



TELOS HPLC Columns

- Available from stock in 3 and 5µm particle sizes
- Available from stock in Silica, C8, C18 AB-D, C18 Polar, PFP (Penta Fluoro Phenyl), Phenyl Hexyl, CN and HILIC bonded phases
- 300Å C4 for peptides and proteins
- TELOS Columns are also available in Phenyl bonded materials upon special request

TELOS HPLC COLUMNS

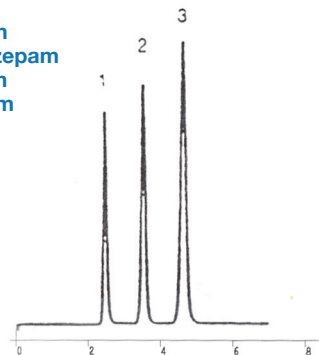
TELOS Phenyl Hexyl 150 X 4.6mm 5µm

Mobile Phase : Acetonitrile/Water (80:20, v/v)

Flow Rate : 1.0ml/min

Detection : UV @ 235nm

Sample : 1. Lormetazepam
2. Diazepam
3. Oxazepam



| PART NUMBER | DESCRIPTION |
|------------------------|--------------------------------------|
| TELOS C18 | |
| 3000-5-250-046 | TELOS C18 5µm 250 x 4.6mmid |
| 3000-5-150-046 | TELOS C18 5µm 150 x 4.6mmid |
| 3000-5-100-046 | TELOS C18 5µm 100 x 4.6mmid |
| 3000-3-150-046 | TELOS C18 3µm 150 x 4.6mmid |
| 3000-3-100-046 | TELOS C18 3µm 100 x 4.6mmid |
| TELOS C18 AB-D | |
| 3001-5-250-046 | TELOS C18 AB-D C18 5µm 250 x 4.6mmid |
| 3001-5-150-046 | TELOS C18 AB-D C18 5µm 150 x 4.6mmid |
| 3001-5-100-046 | TELOS C18 AB-D C18 5µm 100 x 4.6mmid |
| 3001-3-150-046 | TELOS C18 AB-D C18 3µm 150 x 4.6mmid |
| 3001-3-100-046 | TELOS C18 AB-D C18 3µm 100 x 4.6mmid |
| TELOS C18 Polar | |
| 3002-5-250-046 | TELOS C18 Polar 5µm 250 x 4.6mmid |
| 3002-5-150-046 | TELOS C18 Polar 5µm 150 x 4.6mmid |
| 3002-5-100-046 | TELOS C18 Polar 5µm 100 x 4.6mmid |
| 3002-3-150-046 | TELOS C18 Polar 3µm 150 x 4.6mmid |
| 3002-3-100-046 | TELOS C18 Polar 3µm 100 x 4.6mmid |
| TELOS C8 | |
| 3019-5-250-046 | TELOS C8 5µm 250 x 4.6mmid |
| 3019-5-150-046 | TELOS C8 5µm 150 x 4.6mmid |
| 3019-5-100-046 | TELOS C8 5µm 100 x 4.6mmid |
| 3019-3-150-046 | TELOS C8 3µm 150 x 4.6mmid |
| 3019-3-100-046 | TELOS C8 3µm 100 x 4.6mmid |

| PART NUMBER | DESCRIPTION |
|---------------------------|--------------------------------------|
| TELOS PFP | |
| 3017-5-250-046 | TELOS PFP 5µm 250 x 4.6mmid |
| 3017-5-150-046 | TELOS PFP 5µm 150 x 4.6mmid |
| 3017-5-100-046 | TELOS PFP 5µm 100 x 4.6mmid |
| 3017-3-150-046 | TELOS PFP 3µm 150 x 4.6mmid |
| 3017-3-100-046 | TELOS PFP 3µm 100 x 4.6mmid |
| TELOS Phenyl Hexyl | |
| 3037-5-250-046 | TELOS Phenyl Hexyl 5µm 250 x 4.6mmid |
| 3037-5-150-046 | TELOS Phenyl Hexyl 5µm 150 x 4.6mmid |
| 3037-5-100-046 | TELOS Phenyl Hexyl 5µm 100 x 4.6mmid |
| 3037-3-150-046 | TELOS Phenyl Hexyl 3µm 150 x 4.6mmid |
| 3037-3-100-046 | TELOS Phenyl Hexyl 3µm 100 x 4.6mmid |
| TELOS Cyano | |
| 3038-5-250-046 | TELOS Cyano 5µm 250 x 4.6mmid |
| 3038-5-150-046 | TELOS Cyano 5µm 150 x 4.6mmid |
| 3038-5-100-046 | TELOS Cyano 5µm 100 x 4.6mmid |
| 3038-3-150-046 | TELOS Cyano 3µm 150 x 4.6mmid |
| 3038-3-100-046 | TELOS Cyano 3µm 100 x 4.6mmid |
| TELOS Silica HILIC | |
| 3046-5-250-046 | TELOS Silica HILIC 5µm 250 x 4.6mmid |
| 3046-5-150-046 | TELOS Silica HILIC 5µm 150 x 4.6mmid |
| 3046-5-100-046 | TELOS Silica HILIC 5µm 100 x 4.6mmid |
| 3046-3-150-046 | TELOS Silica HILIC 3µm 150 x 4.6mmid |
| 3046-3-100-046 | TELOS Silica HILIC 3µm 100 x 4.6mmid |

TELOS MSP C4 300Å – Analysis of Peptides and Proteins

TELOS MSP C4 300Å is specifically developed for the analysis of peptides and proteins. Available in both 2.1 and 4.6mmid columns, the butyl stationary phase provides excellent separation of glycoproteins, haemoglobin variants, human growth hormone and membrane proteins

| PART NUMBER | DESCRIPTION |
|--------------------------|-------------------------------------|
| TELOS MSP C4 300Å | |
| 3059-5-100-021 | TELOS MSP C4 5µm 300Å 100 x 2.1mmid |
| 3059-5-050-021 | TELOS MSP C4 5µm 300Å 50 x 2.1mmid |
| 3059-5-150-046 | TELOS MSP C4 5µm 300Å 150 x 4.6mmid |
| 3059-5-100-046 | TELOS MSP C4 5µm 300Å 100 x 4.6mmid |

TELOS UHPLC Columns

- Available in 1.8µm particle size
- Available in Silica, C8, C18 AB-D, C18 Polar, PFP (Penta Fluoro Phenyl), Phenyl Hexyl, CN and HILIC bonded phases
- Low bleed Penta Fluoro Phenyl and mass spec optimised C18
- 300Å C4 for peptides and proteins
- TELOS Columns are also available in Phenyl bonded materials on special request
- TELOS UHPLC columns provide the highest resolution over a wide variety flow rate conditions and mobile phase compositions

TELOS UHPLC 1.8µm columns are specifically designed for use with ultra high pressure liquid chromatographs.

These columns have been engineered for chromatography at pressures up to 19,000psi. Expertise in high purity silica selection, surface modification, high density bonding technology and column packing technology has enabled Kinesis to develop high quality materials based on the 1.8µm particle technology.

TELOS C18 MSO is a fully porous C18 optimised for use with LC-MS applications.

TELOS MSP C4 300Å is also available in 2.1mmid column geometries for high performance bio molecule separations.

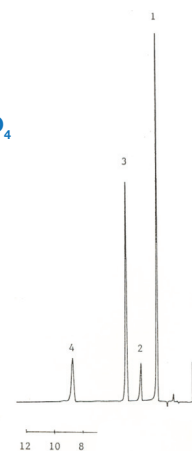
| PART NUMBER | DESCRIPTION |
|---------------------------|--|
| TELOS C18 | |
| 3000-2-100-021 | TELOS C18 1.8µm 100 x 2.1mmid |
| 3000-2-050-021 | TELOS C18 1.8µm 50 x 2.1mmid |
| TELOS C18 AB-D C18 | |
| 3001-2-100-021 | TELOS C18 AB-D C18 1.8µm 100 x 2.1mmid |
| 3001-2-050-021 | TELOS C18 AB-D C18 1.8µm 50 x 2.1mmid |
| TELOS C8 | |
| 3019-2-100-021 | TELOS C8 1.8µm 100 x 2.1mmid |
| 3019-2-050-021 | TELOS C8 1.8µm 50 x 2.1mmid |
| TELOS PFP | |
| 3017-2-100-021 | TELOS PFP 1.8µm 100 x 2.1mmid |
| 3017-2-050-021 | TELOS PFP 1.8µm 50 x 2.1mmid |
| TELOS PFP-LB | |
| 3067-2-100-021 | TELOS PFP-LB 100 x 2.1mmid |
| 3067-2-050-021 | TELOS PFP-LB 50 x 2.1mmid |

TELOS UHPLC Chromatograms

TELOS C18 Polar 1.8µm 10cm x 2.1mm

Mobile Phase : CH₃CN/0.05M KH₂PO₄
(10:90, v/v) pH = 3.2
Flow Rate : 0.4ml/min
Detection : UV @ 254nm
Temperature : Ambient

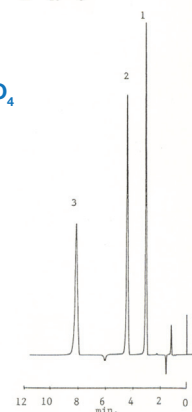
1. Procainamide HCL
2. (+)-V-Ephedrine HCL
3. Acetaminophen
4. Caffeine



TELOS PFP 1.8µm 10cm x 2.1mm

Mobile Phase : CH₃CN/0.05M KH₂PO₄
(10:90, v/v) pH = 3.2
Flow Rate : 0.4ml/min
Detection : UV @ 254nm
Temperature : Ambient

1. Theobromine
2. Theophylline
3. Caffeine



| PART NUMBER | DESCRIPTION |
|---------------------------|--|
| TELOS Phenyl Hexyl | |
| 3037-2-100-021 | TELOS Phenyl Hexyl 1.8µm 100 x 2.1mmid |
| 3037-2-050-021 | TELOS Phenyl Hexyl 1.8µm 50 x 2.1mmid |
| TELOS C18 MSO | |
| 3068-5-100-021 | TELOS C18 MSO 2.3µm 100 x 2.1mmid |
| 3068-5-050-021 | TELOS C18 MSO 2.3µm 50 x 2.1mmid |
| TELOS Cyano | |
| 3038-2-100-021 | TELOS Cyano 1.8µm 100 x 2.1mmid |
| 3038-2-050-021 | TELOS Cyano 1.8µm 50 x 2.1mmid |
| TELOS Silica | |
| 3046-2-100-021 | TELOS Silica HILIC 1.8µm 100 x 2.1mmid |
| 3046-2-050-021 | TELOS Silica HILIC 1.8µm 50 x 2.1mmid |
| TELOS C18 Polar | |
| 3002-2-100-021 | TELOS C18 Polar 1.8µm 100 x 2.1mmid |
| 3002-2-050-021 | TELOS C18 Polar 1.8µm 50 x 2.1mmid |

TELOS HPLC Columns Method Development Kit

The TELOS HPLC Method Development Kit permits the chromatographer to rapidly evaluate a selection of bonded phases with different selectivities for routine analysis. Once resolution is obtained (either partial or total) with a particular phase then the exact column configuration and size can be determined to perfect the HPLC separation.

| PART NUMBER | DESCRIPTION |
|----------------|---|
| 9000-3-100-046 | TELOS HPLC Method Development Kit 3µm 100 x 4.6mmid* |

*includes one column of each of the following:

- | | |
|--------------------|-----------------------|
| 1. TELOS C18 | 4. TELOS Silica HILIC |
| 2. TELOS PFP | 5. TELOS Cyano |
| 3. TELOS C18 Polar | |

TELOS UHPLC Columns Method Development Kit

The TELOS UHPLC Method Development Kit permits the chromatographer to rapidly evaluate a selection of bonded phases with different selectivities for routine analysis. Once resolution is obtained (either partial or total) with a particular phase then the exact column configuration and size can be determined to perfect the UHPLC separation.

| PART NUMBER | DESCRIPTION |
|----------------|---|
| 9000-3-100-020 | TELOS U ^H PLC Method Development Kit 3µm 100 x 1.8mmid* |

*includes one column of each of the following:

- | | |
|--------------------|-----------------------|
| 1. TELOS C18 | 4. TELOS Silica HILIC |
| 2. TELOS PFP | 5. TELOS Cyano |
| 3. TELOS C18 Polar | |

GUARD CARTRIDGES

All TELOS HPLC Columns are supported by 1cm guard cartridges packed with the identical packing material.

Guard cartridges are available as a pack of 5 and are used with a direct connect cartridge holder (see below).

TELOS HPLC Guard Column Cartridges have a standard part number system, utilising the TELOS HPLC Column product code.

Example

Description: TELOS PFP 5µm 100 x 4.6mmid

Part Number: **3017**-5-100-046

product code

The product code in the above example is **3017**
The part number for the relevant guard cartridge is **3017-5-1-046**.

GUARD CARTRIDGE HOLDER

The direct connect TELOS Guard Cartridge Holder is used with the 4.6mmid TELOS Guard Cartridges. Ordering information is as follows:

| PART NUMBER | DESCRIPTION |
|-------------|------------------------------|
| 9000-1-001 | TELOS Guard Cartridge Holder |

SPECIFICATIONS

Full specifications for the TELOS materials and columns are available by visiting your local Kinesis website shown at the bottom of the page.

EVALUATION COLUMNS

Kinesis TELOS HPLC and UHPLC columns are available for evaluation. To find out further information go to your local Kinesis website shown at the bottom of the page.