



HPLC AND UHPLC COLUMNS

300Å C4
and low bleed PFP
now available

- 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 PRODUCT OVERVIEW

All **TELOS HPLC Columns** are individually tested, confirming efficiency and peak asymmetry, and ensuring the columns pass the Kinesis rigorous QC standards. Each column is supplied with a test chromatogram which outlines the test conditions and analytes for customer reproduction and a Column Care and Use Guide which outlines the recommended conditioning, storage and cleaning procedures for the TELOS Columns.

The TELOS HPLC and UHPLC Column range of bonded phases includes:

TELOS C8 and C18 - highly base deactivated phases, resulting in the most inert silica based C8 and C18 materials available. High density bonding levels ($4\mu\text{mol}/\text{m}^2$) result in columns with superior peak shapes, reproducibility and selectivity over a wide pH range (pH 1-12).

TELOS C18 AB-D - specially deactivated to produce superior peak shapes and performance for amines and acids. Kinesis ultra pure silica selection, proprietary bonding, endcapping reagents and procedures yield columns that are much more resistant to degradation by acidic and basic mobile phase compositions, while improving peak shapes for amines and acids as a result of the reduced negative surface interactions.

TELOS C18 Polar - a high density packing specifically engineered for the retention of polar analytes, producing superior hydrophobic performance even when utilising 100% aqueous mobile phases.

TELOS PFP - Penta Fluoro Phenyl (PFP) is a hydrophobic phase with alternative selectivity when compared to classical C18 materials. The separation process is based on 4 different retention mechanisms ($\pi-\pi$, dipole-dipole, polar (H bonds) and hydrophobic interactions). The PFP phase is recommended for the separation of aromatic and unsaturated compounds, phenols, halogenated compounds, isomers, polar compounds and the retention of basic compounds.

TELOS PFP-LB - a penta fluoro phenyl that has been baseline stabilised and is ideal for high performance separations including natural products, halogenated compounds, aromatics, conjugated compounds and trace impurities in complex matrices. Many of these high performance separations were not possible with existing PFP columns, particularly in the area of trace impurities, where baseline bleed levels were unacceptable.

TELOS Phenyl Hexyl - exhibits unique selectivity and comprises a hexyl linker and a phenyl ring. The Kinesis dense bonding process and the presence of the hexyl linker reduces bonded phase hydrolysis and increases chemical stability. Applications include an increased retention for polar, aromatic and amine compounds.

TELOS MSP C4 300Å - consists of butyl aliphatic groups bonded to the surface of 300Å pore diameter ultra high purity silica. TELOS MSP C4 300Å can be used to separate glycoproteins, haemoglobin variants, human growth hormone and membrane proteins.

TELOS Cyano - because of its properties, Cyano may be employed in both normal phase and reversed phase. When it is used as normal phase, the rapid equilibration with mobile phase will make it more convenient to use than silica columns, especially for gradient elution applications. It is ideal for the separation of aromatic alcohols, pesticides and broad ranges of pharmaceuticals, including steroids and analgesics. In reversed phase applications TELOS Cyano is less retentive than C18 and C8. Applications include the retention and separation of strongly basic analytes, fast elution of hydrophobic molecules, a unique selectivity, good peak shape for polar and compatibility with highly aqueous mobile phases.

TELOS Silica HILIC - used in conjunction with highly concentrated organic mobile phases (>85%, v/v acetonitrile) to enhance the retention of polar analytes which are unretained in reverse phase conditions.

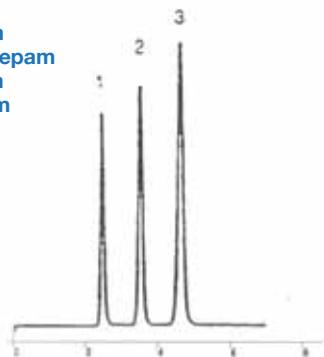
TELOS HPLC COLUMNS

- Available from stock in 3 and 5 μ m particle sizes
- Available from stock in Silica, C8, C18 AB-D, C18 Polar, PFP (Penta Fluoro Phenyl), Phenyl Hexyl, CN and HILIC bonded phases
- 300 \AA 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 5 μ m

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 5 μ m 250 x 4.6mmid
3000-5-150-046	TELOS C18 5 μ m 150 x 4.6mmid
3000-5-100-046	TELOS C18 5 μ m 100 x 4.6mmid
3000-3-150-046	TELOS C18 3 μ m 150 x 4.6mmid
3000-3-100-046	TELOS C18 3 μ m 100 x 4.6mmid
TELOS C18 AB-D	
3001-5-250-046	TELOS C18 AB-D C18 5 μ m 250 x 4.6mmid
3001-5-150-046	TELOS C18 AB-D C18 5 μ m 150 x 4.6mmid
3001-5-100-046	TELOS C18 AB-D C18 5 μ m 100 x 4.6mmid
3001-3-150-046	TELOS C18 AB-D C18 3 μ m 150 x 4.6mmid
3001-3-100-046	TELOS C18 AB-D C18 3 μ m 100 x 4.6mmid
TELOS C18 Polar	
3002-5-250-046	TELOS C18 Polar 5 μ m 250 x 4.6mmid
3002-5-150-046	TELOS C18 Polar 5 μ m 150 x 4.6mmid
3002-5-100-046	TELOS C18 Polar 5 μ m 100 x 4.6mmid
3002-3-150-046	TELOS C18 Polar 3 μ m 150 x 4.6mmid
3002-3-100-046	TELOS C18 Polar 3 μ m 100 x 4.6mmid
TELOS C8	
3019-5-250-046	TELOS C8 5 μ m 250 x 4.6mmid
3019-5-150-046	TELOS C8 5 μ m 150 x 4.6mmid
3019-5-100-046	TELOS C8 5 μ m 100 x 4.6mmid
3019-3-150-046	TELOS C8 3 μ m 150 x 4.6mmid
3019-3-100-046	TELOS C8 3 μ m 100 x 4.6mmid

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

TELOS MSP C4 300 \AA – Analysis of Peptides and Proteins

TELOS MSP C4 300 \AA 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 300\AA	
3059-5-100-021	TELOS MSP C4 5 μ m 300 \AA 100 x 2.1mmid
3059-5-050-021	TELOS MSP C4 5 μ m 300 \AA 50 x 2.1mmid
3059-5-150-046	TELOS MSP C4 5 μ m 300 \AA 150 x 4.6mmid
3059-5-100-046	TELOS MSP C4 5 μ m 300 \AA 100 x 4.6mmid

TELOS UHPLC COLUMNS

- Available in 1.8 μ m 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
- 300 \AA 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 1.8 μ m 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 1.8 μ m particle technology.

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

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

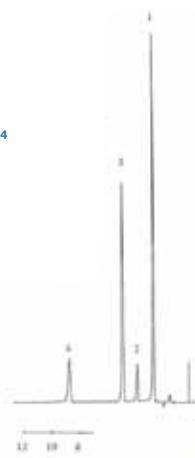
PART NUMBER	DESCRIPTION
TELOS C18	
3000-2-100-021	TELOS C18 1.8 μ m 100 x 2.1mmid
3000-2-050-021	TELOS C18 1.8 μ m 50 x 2.1mmid
TELOS C18 AB-D C18	
3001-2-100-021	TELOS C18 AB-D C18 1.8 μ m 100 x 2.1mmid
3001-2-050-021	TELOS C18 AB-D C18 1.8 μ m 50 x 2.1mmid
TELOS C8	
3019-2-100-021	TELOS C8 1.8 μ m 100 x 2.1mmid
3019-2-050-021	TELOS C8 1.8 μ m 50 x 2.1mmid
TELOS PFP	
3017-2-100-021	TELOS PFP 1.8 μ m 100 x 2.1mmid
3017-2-050-021	TELOS PFP 1.8 μ m 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 1.8 μ m 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 1.8 μ m 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



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 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
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- | | |
|--------------------|-----------------------|
| 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.

# Global Kinesis

Kinesis is a leading international supplier of chromatography, liquid handling, sample storage and medicinal chemistry consumables and equipment. The company's products are used extensively in the pharmaceutical, environmental, forensic, life sciences, food, biotechnology and academic markets.

A privately owned company, Kinesis was established in 1997 and offers its customers a range of first class products, services and solutions. Kinesis has expanded its reach internationally with subsidiary offices in Australia, Germany and the USA. A network of international distributors ensures the Kinesis range of products is available on a worldwide basis.

Kinesis work with industry leading manufacturers, many on a global exclusive or preferred supplier basis. Key suppliers to the Kinesis Group include AccuStandard, Cerilliant, ChromSword, Corning, Diba Industries, GL Sciences, Hamamatsu, Heraeus, HTL, IDEX Health & Science, Lipomed, Micronic, Microsaic, Parker domnick hunter, SGE Analytical Science, Tosoh Bioscience and YMC.

The Kinesis UK facility houses state of art processes for the pre-alignment of deuterium lamps. Approved by the world's two leading lamp manufacturers, Hamamatsu and Heraeus, these accredited processes have helped Kinesis become the world's largest 3<sup>rd</sup> party provider of pre-aligned deuterium lamps. Pipette service and calibration suites at both the UK and German locations offer back to base or field-based pipette service and calibration. The UK facility is UKAS accredited, offering services in line with today's market requirements.

KLTD-1536-0915



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 **Kinesis**  
Scientific Experts  
[sales@kinesis-group.com](mailto:sales@kinesis-group.com) [kinesis-group.com](http://kinesis-group.com)



# HPLC AND UHPLC COLUMNS

## *Commercial Equivalent Media Range*

- Comprehensive range of Commercial Equivalent Media - replacement for original manufacturer phases
- Phenomenex Luna® and Prodigy™, Waters® SunFire™, Symmetry® SymmetryShield™ and μBondapak®, Atlantis® and Spherisorb® GL Sciences Inertsil®, Thermo Fisher Scientific® Hypersil®, Hypersil BDS® and Hypersil GOLD® and Advanced Chromatography Technologies ACE®
- Identical to original manufacturers particle sizes
- All popular bonding chemistries
- 100, 150 and 250mm column geometries

Kinesis has developed a range of TELOS Commercial Equivalent Media HPLC and UHPLC Columns. Expertise in high purity silica selection, surface modification, bonding technology and column packing technology has enabled Kinesis to develop high quality materials which are interchangeable with many commercially available columns.



All TELOS Commercial Equivalent Media HPLC and UHPLC Columns are individually tested, confirming efficiency, peak asymmetry and ensuring each column passes the Kinesis rigorous QC standards. Each column is supplied with a test chromatogram which outlines the test conditions and analytes for customer reproduction and a Column Care and Use Guide which outlines the recommended conditioning, storage and cleaning procedures for the TELOS Commercial Equivalent Media Columns.

# TELOS LU

The TELOS LU Commercial Equivalent Media range is a replacement for Phenomenex Luna.

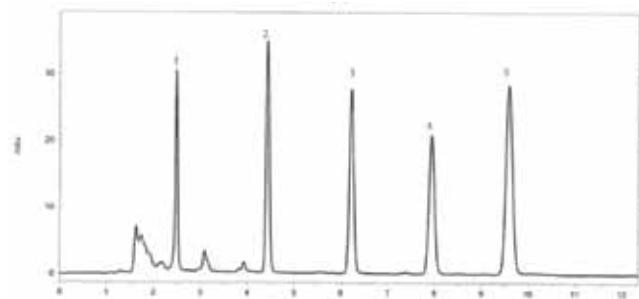
- **TELOS LU - available from stock in 3 and 5µm particle sizes**
- **TELOS LU - available from stock in Silica, C8, C8(2), C18, C18(2), Phenyl Hexyl, CN and NH<sub>2</sub> bonded phases**
- **TELOS LU is also available in 10µm particle size materials upon special request**
- **TELOS LU is also available in C5, HILIC, PFP and SCX bonded phases upon special request**

Long column lifetimes with consistent reproducibility are standard for the TELOS Commercial Equivalent Media Columns, and more importantly, excellent efficiencies, peak shape and resolution are obtained for all Luna HPLC applications.

## TELOS LU C18(2) 5µm, 250 x 4.6mm

Mobile Phase : 70/30, v/v  
Acetonitrile/Water  
Flow Rate : 1.0ml/min  
Detection : UV @ 254nm  
Temp : Ambient Injection  
Volume : 5µl

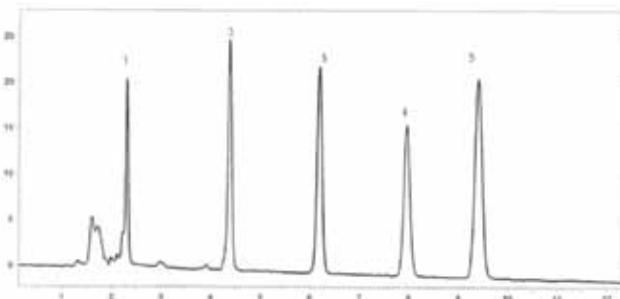
Analytes  
1. Uracil  
2. Acetophenone  
3. Benzene  
4. Toluene  
5. Naphthalene



## Phenomenex Luna C18(2) 5µm, 250 x 4.6mm

Mobile Phase : 70/30, v/v  
Acetonitrile/Water  
Flow Rate : 1.0ml/min  
Detection : UV @ 254nm  
Temp : Ambient Injection  
Volume : 5µl

Analytes  
1. Uracil  
2. Acetophenone  
3. Benzene  
4. Toluene  
5. Naphthalene



### PART NUMBER | DESCRIPTION

#### TELOS LU Silica(2)

|                |                                      |
|----------------|--------------------------------------|
| 1248-5-250-046 | TELOS LU Silica(2) 5µm 250 x 4.6mmid |
| 1248-5-150-046 | TELOS LU Silica(2) 5µm 150 x 4.6mmid |
| 1248-5-100-046 | TELOS LU Silica(2) 5µm 100 x 4.6mmid |
| 1248-3-150-046 | TELOS LU Silica(2) 3µm 150 x 4.6mmid |
| 1248-3-100-046 | TELOS LU Silica(2) 3µm 100 x 4.6mmid |

#### TELOS LU C18(2)

|                |                                   |
|----------------|-----------------------------------|
| 1204-5-250-046 | TELOS LU C18(2) 5µm 250 x 4.6mmid |
| 1204-5-150-046 | TELOS LU C18(2) 5µm 150 x 4.6mmid |
| 1204-5-100-046 | TELOS LU C18(2) 5µm 100 x 4.6mmid |
| 1204-3-150-046 | TELOS LU C18(2) 3µm 150 x 4.6mmid |
| 1204-3-100-046 | TELOS LU C18(2) 3µm 100 x 4.6mmid |

#### TELOS LU C18

|                |                                |
|----------------|--------------------------------|
| 1200-5-250-046 | TELOS LU C18 5µm 250 x 4.6mmid |
| 1200-5-150-046 | TELOS LU C18 5µm 150 x 4.6mmid |
| 1200-5-100-046 | TELOS LU C18 5µm 100 x 4.6mmid |
| 1200-3-150-046 | TELOS LU C18 3µm 150 x 4.6mmid |
| 1200-3-100-046 | TELOS LU C18 3µm 100 x 4.6mmid |

#### TELOS LU C8(2)

|                |                                  |
|----------------|----------------------------------|
| 2020-5-250-046 | TELOS LU C8(2) 5µm 250 x 4.6mmid |
| 2020-5-150-046 | TELOS LU C8(2) 5µm 150 x 4.6mmid |
| 2020-5-100-046 | TELOS LU C8(2) 5µm 100 x 4.6mmid |
| 2020-3-150-046 | TELOS LU C8(2) 3µm 150 x 4.6mmid |
| 2020-3-100-046 | TELOS LU C8(2) 3µm 100 x 4.6mmid |

#### TELOS LU C8

|                |                               |
|----------------|-------------------------------|
| 2019-5-250-046 | TELOS LU C8 5µm 250 x 4.6mmid |
| 2019-5-150-046 | TELOS LU C8 5µm 150 x 4.6mmid |

### PART NUMBER | DESCRIPTION

#### TELOS LU C8 5µm 100 x 4.6mmid

|                |                               |
|----------------|-------------------------------|
| 2019-5-100-046 | TELOS LU C8 3µm 100 x 4.6mmid |
| 2019-3-100-046 | TELOS LU C8 3µm 100 x 4.6mmid |

#### TELOS LU C5

|                |                               |
|----------------|-------------------------------|
| 2027-5-250-046 | TELOS LU C5 5µm 250 x 4.6mmid |
| 2027-5-150-046 | TELOS LU C5 5µm 150 x 4.6mmid |
| 2027-5-100-046 | TELOS LU C5 5µm 100 x 4.6mmid |
| 2027-3-150-046 | TELOS LU C5 3µm 150 x 4.6mmid |
| 2027-3-100-046 | TELOS LU C5 3µm 100 x 4.6mmid |

#### TELOS LU Phenyl Hexyl

|                |                                         |
|----------------|-----------------------------------------|
| 2037-5-250-046 | TELOS LU Phenyl Hexyl 5µm 250 x 4.6mmid |
| 2037-5-150-046 | TELOS LU Phenyl Hexyl 5µm 150 x 4.6mmid |
| 2037-5-100-046 | TELOS LU Phenyl Hexyl 5µm 100 x 4.6mmid |
| 2037-3-150-046 | TELOS LU Phenyl Hexyl 3µm 150 x 4.6mmid |
| 2037-3-100-046 | TELOS LU Phenyl Hexyl 3µm 100 x 4.6mmid |

#### TELOS LU Cyano

|                |                                  |
|----------------|----------------------------------|
| 2038-5-250-046 | TELOS LU Cyano 5µm 250 x 4.6mmid |
| 2038-5-150-046 | TELOS LU Cyano 5µm 150 x 4.6mmid |
| 2038-5-100-046 | TELOS LU Cyano 5µm 100 x 4.6mmid |
| 2038-3-150-046 | TELOS LU Cyano 3µm 150 x 4.6mmid |
| 2038-3-100-046 | TELOS LU Cyano 3µm 100 x 4.6mmid |

#### TELOS LU NH2

|                |                                |
|----------------|--------------------------------|
| 2042-5-250-046 | TELOS LU NH2 5µm 250 x 4.6mmid |
| 2042-5-150-046 | TELOS LU NH2 5µm 150 x 4.6mmid |
| 2042-5-100-046 | TELOS LU NH2 5µm 100 x 4.6mmid |
| 2042-3-150-046 | TELOS LU NH2 3µm 150 x 4.6mmid |
| 2042-3-100-046 | TELOS LU NH2 3µm 100 x 4.6mmid |

# TELOS PR

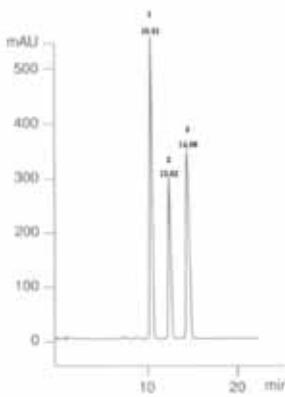
The TELOS PR Commercial Equivalent Media range is a replacement for Phenomenex Prodigy.

- **TELOS PR - available in 3, 5 and 10µm particle sizes in the 100Å pore size and Silica, Silica (3), ODS3 and Phenyl (3) bonded phases**
- **TELOS PR - available in 3 and 5µm particle sizes in the 150Å pore size and Silica, C8, ODS2**
- **Ideal LC/MS gradient R&D**

Long column lifetimes with consistent reproducibility are standard for the TELOS Commercial Equivalent Media Columns, and more importantly, excellent efficiencies, peak shape and resolution are obtained for all Prodigy HPLC applications.

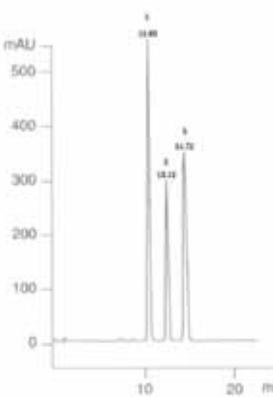
## TELOS PR ODS2 5µm, 150 X 4.6mm

Mobile Phase : Acetonitrile/Methanol (85:15, v/v)  
Flow Rate : 1.0ml/min  
Detection : UV @ 296nm  
Sample : 1. δ-Tocopherol  
2. γ-Tocopherol  
3. α-Tocopherol



## Prodigy ODS2 5µm, 150 X 4.6mm

Mobile Phase : Acetonitrile/Methanol (85:15, v/v)  
Flow Rate : 1.0ml/min  
Detection : UV @ 296nm  
Sample : 1. δ-Tocopherol  
2. γ-Tocopherol  
3. α-Tocopherol



| PART NUMBER             | DESCRIPTION                           |
|-------------------------|---------------------------------------|
| <b>TELOS PR Silica</b>  |                                       |
| 1350-5-250-046          | TELOS PR Silica 150 5µm 250 x 4.6mmid |
| 1350-5-150-046          | TELOS PR Silica 150 5µm 150 x 4.6mmid |
| 1350-5-100-046          | TELOS PR Silica 150 5µm 100 x 4.6mmid |
| <b>TELOS PR ODS (2)</b> |                                       |
| 1305-5-250-046          | TELOS PR ODS (2) 5µm 250 x 4.6mmid    |
| 1305-5-150-046          | TELOS PR ODS (2) 5µm 150 x 4.6mmid    |
| 1305-5-100-046          | TELOS PR ODS (2) 5µm 100 x 4.6mmid    |
| <b>TELOS PR C8</b>      |                                       |
| 1319-5-250-046          | TELOS PR C8 5µm 250 x 4.6mmid         |
| 1319-5-150-046          | TELOS PR C8 5µm 150 x 4.6mmid         |
| 1319-5-100-046          | TELOS PR C8 5µm 100 x 4.6mmid         |
| <b>TELOS PR ODS (3)</b> |                                       |
| 1306-10-250-046         | TELOS PR ODS (3) 10µm 250 x 4.6mmid   |
| 1306-10-150-046         | TELOS PR ODS (3) 10µm 150 x 4.6mmid   |
| 1306-10-100-046         | TELOS PR ODS (3) 10µm 100 x 4.6mmid   |
| 1306-5-250-046          | TELOS PR ODS (3) 5µm 250 x 4.6mmid    |
| 1306-5-150-046          | TELOS PR ODS (3) 5µm 150 x 4.6mmid    |

| PART NUMBER                | DESCRIPTION                            |
|----------------------------|----------------------------------------|
| 1306-5-100-046             | TELOS PR ODS (3) 5µm 100 x 4.6mmid     |
| 1306-3-150-046             | TELOS PR ODS (3) 3µm 150 x 4.6mmid     |
| 1306-3-100-046             | TELOS PR ODS (3) 3µm 100 x 4.6mmid     |
| <b>TELOS PR Phenyl (3)</b> |                                        |
| 1336-5-250-046             | TELOS PR Phenyl (3) 5µm 250 x 4.6mmid  |
| 1336-5-150-046             | TELOS PR Phenyl (3) 5µm 150 x 4.6mmid  |
| 1336-5-100-046             | TELOS PR Phenyl (3) 5µm 100 x 4.6mmid  |
| <b>TELOS PR Silica</b>     |                                        |
| 1347-5-250-046             | TELOS PR Silica 5µm 250 x 4.6mmid      |
| 1347-5-150-046             | TELOS PR Silica 5µm 150 x 4.6mmid      |
| 1347-5-100-046             | TELOS PR Silica 5µm 100 x 4.6mmid      |
| <b>TELOS PR Silica (3)</b> |                                        |
| 1349-10-250-046            | TELOS PR Silica (3) 10µm 250 x 4.6mmid |
| 1349-10-150-046            | TELOS PR Silica (3) 10µm 150 x 4.6mmid |
| 1349-10-100-046            | TELOS PR Silica (3) 10µm 100 x 4.6mmid |
| 1349-5-250-046             | TELOS PR Silica (3) 5µm 250 x 4.6mmid  |
| 1349-5-150-046             | TELOS PR Silica (3) 5µm 150 x 4.6mmid  |
| 1349-5-100-046             | TELOS PR Silica (3) 5µm 100 x 4.6mmid  |

# TELOS SU

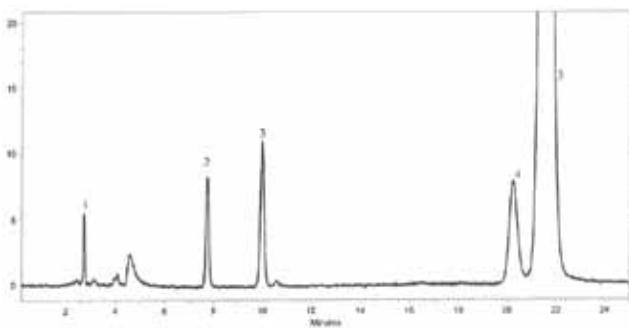
The TELOS SU Commercial Equivalent Media range is a replacement for Waters SunFire.

- **TELOS SU - available from stock in 2.5, 3.5 and 5 $\mu$ m particle sizes**
- **TELOS SU - available from stock in C8 and C18 bonded phases**
- **TELOS SU exhibits identical selectivity to Waters SunFire materials**

Long column lifetimes with consistent reproducibility are standard for the TELOS Commercial Equivalent Media Columns, and more importantly, excellent efficiencies, peak shape and resolution are obtained for all Waters SunFire HPLC applications. TELOS SU excels by providing symmetrical peaks for improved resolution and quantitation of acidic, neutral and basic compounds at low and intermediate pH range conditions.

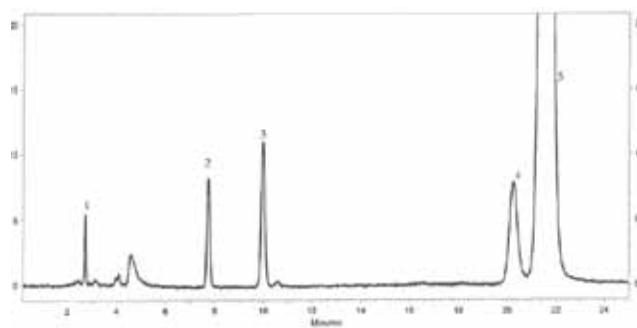
## TELOS SU C18 5 $\mu$ m, 250 x 4.6mm

Mobile Phase : 80/20, v/v Methanol/Buffer  
(20mM Potassium Phosphate pH=7)  
Flow Rate : 1.0ml/min  
Detection : UV @ 225nm  
Column Temp : 23°C  
Injection Vol : 5 $\mu$ l  
Sample :  
1. Uracil  
2. Toluene  
3. Ethylbenzene  
4. Quinizarin  
5. Amitriptyline



## Waters SunFire C18 250 x 4.6mm 5 $\mu$ m

Mobile Phase : 80/20, v/v Methanol/Buffer  
(20mM Potassium Phosphate pH=7)  
Flow Rate : 1.0ml/min  
Detection : UV @ 225nm  
Column Temp : 23°C  
Injection Vol : 5 $\mu$ l  
Sample :  
1. Uracil  
2. Toluene  
3. Ethylbenzene  
4. Quinizarin  
5. Amitriptyline



| PART NUMBER         | DESCRIPTION                            |
|---------------------|----------------------------------------|
| <b>TELOS SU C18</b> |                                        |
| 1500-5-250-046      | TELOS SU C18 5 $\mu$ m 250 x 4.6mmid   |
| 1500-5-150-046      | TELOS SU C18 5 $\mu$ m 150 x 4.6mmid   |
| 1500-5-100-046      | TELOS SU C18 5 $\mu$ m 100 x 4.6mmid   |
| 1500-3-150-046      | TELOS SU C18 3.5 $\mu$ m 150 x 4.6mmid |
| 1500-3-100-046      | TELOS SU C18 3.5 $\mu$ m 100 x 4.6mmid |
| 1500-2-100-021      | TELOS SU C18 2.5 $\mu$ m 100 x 2.1mmid |
| 1500-2-050-021      | TELOS SU C18 2.5 $\mu$ m 50 x 2.1mmid  |
| <b>TELOS SU C8</b>  |                                        |
| 1519-5-250-046      | TELOS SU C8 5 $\mu$ m 250 x 4.6mmid    |

| PART NUMBER            | DESCRIPTION                             |
|------------------------|-----------------------------------------|
| <b>TELOS SU C8</b>     |                                         |
| 1519-5-150-046         | TELOS SU C8 5 $\mu$ m 150 x 4.6mmid     |
| 1519-5-100-046         | TELOS SU C8 5 $\mu$ m 100 x 4.6mmid     |
| 1519-3-150-046         | TELOS SU C8 3.5 $\mu$ m 150 x 4.6mmid   |
| 1519-3-100-046         | TELOS SU C8 3.5 $\mu$ m 100 x 4.6mmid   |
| 1519-2-100-021         | TELOS SU C8 2.5 $\mu$ m 100 x 2.1mmid   |
| 1519-2-050-021         | TELOS SU C8 2.5 $\mu$ m 50 x 2.1mmid    |
| <b>TELOS SU Silica</b> |                                         |
| 1547-5-250-046         | TELOS SU Silica 5 $\mu$ m 250 x 4.6mmid |
| 1547-5-150-046         | TELOS SU Silica 5 $\mu$ m 150 x 4.6mmid |
| 1547-5-100-046         | TELOS SU Silica 5 $\mu$ m 100 x 4.6mmid |

# TELOS SY AND TELOS SY SH

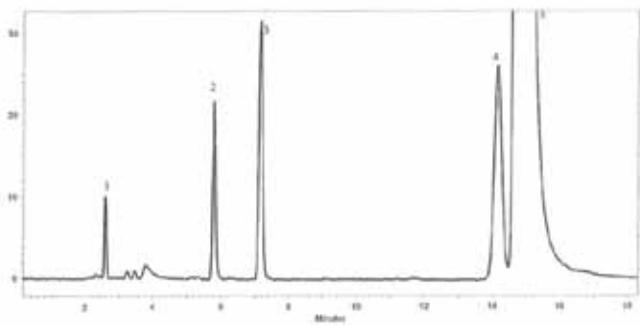
The TELOS SY and TELOS SY SH Commercial Equivalent Media ranges are replacements for Waters Symmetry and SymmetryShield.

- **TELOS SY and TELOS SY SH - available from stock in 3.5 and 5 $\mu$ m particle sizes**
- **TELOS SY - available from stock in C8 and C18 bonded phases with 300Å C4 and C18**
- **TELOS SY SH - available from stock in C8 and C18 bonded phases**
- **TELOS SY and TELOS SY SH exhibit identical selectivity to Waters Symmetry and SymmetryShield materials**

Long column lifetimes with consistent reproducibility are standard for the TELOS Commercial Equivalent Media Columns, and more importantly, excellent efficiencies, peak shape and resolution are obtained for all Waters Symmetry and SymmetryShield HPLC applications.

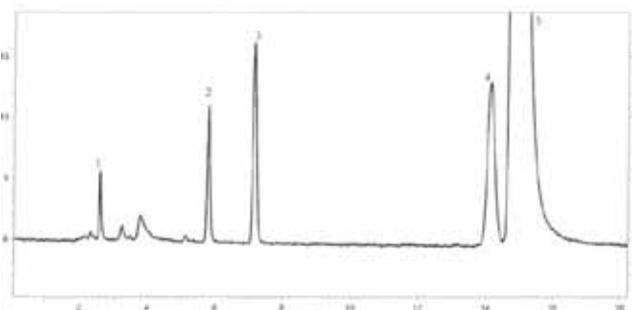
## TELOS SY C18 5 $\mu$ m, 250 x 4.6mm

Mobile Phase : 80/20 v/v Methanol/Buffer  
(20mM Potassium Phosphate pH 7)  
Flow Rate : 1.0ml/min  
Detection : UV @ 225nm  
Column Temp : 23°C  
Injection Volume : 5 $\mu$ l  
Sample :  
1. Uracil  
2. Toluene  
3. Ethylbenzene  
4. Quinizarin  
5. Amitriptyline



## Waters Symmetry C18 5 $\mu$ m, 250 x 4.6mm

Mobile Phase : 80/20 v/v Methanol/Buffer  
(20mM Potassium Phosphate pH 7)  
Flow Rate : 1.0ml/min  
Detection : UV @ 225nm  
Column Temp : 23°C  
Injection Volume : 5 $\mu$ l  
Sample :  
1. Uracil  
2. Toluene  
3. Ethylbenzene  
4. Quinizarin  
5. Amitriptyline



### PART NUMBER | DESCRIPTION

#### TELOS SY C18

|                |                                        |
|----------------|----------------------------------------|
| 1600-5-250-046 | TELOS SY C18 5 $\mu$ m 250 x 4.6mmid   |
| 1600-5-150-046 | TELOS SY C18 5 $\mu$ m 150 x 4.6mmid   |
| 1600-5-100-046 | TELOS SY C18 5 $\mu$ m 100 x 4.6mmid   |
| 1600-3-150-046 | TELOS SY C18 3.5 $\mu$ m 150 x 4.6mmid |
| 1600-3-100-046 | TELOS SY C18 3.5 $\mu$ m 100 x 4.6mmid |

#### TELOS SY C8

|                |                                       |
|----------------|---------------------------------------|
| 1619-5-250-046 | TELOS SY C8 5 $\mu$ m 250 x 4.6mmid   |
| 1619-5-150-046 | TELOS SY C8 5 $\mu$ m 150 x 4.6mmid   |
| 1619-5-100-046 | TELOS SY C8 5 $\mu$ m 100 x 4.6mmid   |
| 1619-3-150-046 | TELOS SY C8 3.5 $\mu$ m 150 x 4.6mmid |
| 1619-3-100-046 | TELOS SY C8 3.5 $\mu$ m 100 x 4.6mmid |

#### TELOS SY 300 C18

|                |                                            |
|----------------|--------------------------------------------|
| 1607-5-250-046 | TELOS SY 300 C18 5 $\mu$ m 250 x 4.6mmid   |
| 1607-5-150-046 | TELOS SY 300 C18 5 $\mu$ m 150 x 4.6mmid   |
| 1607-5-100-046 | TELOS SY 300 C18 5 $\mu$ m 100 x 4.6mmid   |
| 1607-3-150-046 | TELOS SY 300 C18 3.5 $\mu$ m 150 x 4.6mmid |
| 1607-3-100-046 | TELOS SY 300 C18 3.5 $\mu$ m 100 x 4.6mmid |

### PART NUMBER | DESCRIPTION

#### TELOS SY 300 C4

|                |                                           |
|----------------|-------------------------------------------|
| 1629-5-250-046 | TELOS SY 300 C4 5 $\mu$ m 250 x 4.6mmid   |
| 1629-5-150-046 | TELOS SY 300 C4 5 $\mu$ m 150 x 4.6mmid   |
| 1629-5-100-046 | TELOS SY 300 C4 5 $\mu$ m 100 x 4.6mmid   |
| 1629-3-150-046 | TELOS SY 300 C4 3.5 $\mu$ m 150 x 4.6mmid |
| 1629-3-100-046 | TELOS SY 300 C4 3.5 $\mu$ m 100 x 4.6mmid |

#### TELOS SY SH RP18

|                |                                            |
|----------------|--------------------------------------------|
| 1608-5-250-046 | TELOS SY SH RP18 5 $\mu$ m 250 x 4.6mmid   |
| 1608-5-150-046 | TELOS SY SH RP18 5 $\mu$ m 150 x 4.6mmid   |
| 1608-5-100-046 | TELOS SY SH RP18 5 $\mu$ m 100 x 4.6mmid   |
| 1608-3-150-046 | TELOS SY SH RP18 3.5 $\mu$ m 150 x 4.6mmid |
| 1608-3-100-046 | TELOS SY SH RP18 3.5 $\mu$ m 100 x 4.6mmid |

#### TELOS SY SH RP8

|                |                                           |
|----------------|-------------------------------------------|
| 1621-5-250-046 | TELOS SY SH RP8 5 $\mu$ m 250 x 4.6mmid   |
| 1621-5-150-046 | TELOS SY SH RP8 5 $\mu$ m 150 x 4.6mmid   |
| 1621-5-100-046 | TELOS SY SH RP8 5 $\mu$ m 100 x 4.6mmid   |
| 1621-3-150-046 | TELOS SY SH RP8 3.5 $\mu$ m 150 x 4.6mmid |
| 1621-3-100-046 | TELOS SY SH RP8 3.5 $\mu$ m 100 x 4.6mmid |

# TELOS $\mu$ B

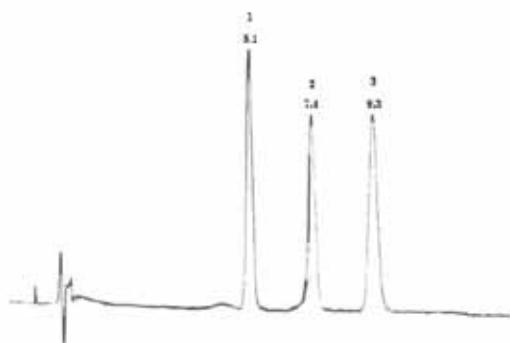
The TELOS  $\mu$ B Commercial Equivalent Media range is a replacement for Waters  $\mu$ Bondapak.

- TELOS  $\mu$ B - available in 5 and 10 $\mu$ m particle sizes and is irregular in particle geometry
- TELOS  $\mu$ B - available in C18, Phenyl, Cyano and Amino bonded phases
- TELOS  $\mu$ B 5 $\mu$ m particle size materials permits faster and more efficient separations than the standard 10 $\mu$ m material

Long column lifetimes with consistent reproducibility are standard for the TELOS Commercial Equivalent Media Columns, and more importantly, excellent efficiencies, peak shape and resolution are obtained for all Waters  $\mu$ Bondapak HPLC applications.

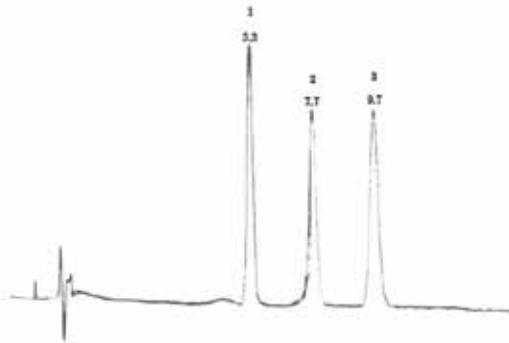
## TELOS $\mu$ B C18 10 $\mu$ 300 x 3.9mm

|                  |   |                                                                                          |
|------------------|---|------------------------------------------------------------------------------------------|
| Mobile Phase     | : | 10/90, v/v Methanol/Buffer<br>(0.015M H <sub>3</sub> PO <sub>4</sub> )                   |
| Flow Rate        | : | 1.0ml/min                                                                                |
| Detection        | : | UV @ 254nm                                                                               |
| Column Temp      | : | 23°C                                                                                     |
| Injection Volume | : | 5 $\mu$ l                                                                                |
| Sample           | : | 1. 4-hydroxylbenzyl alcohol<br>2. 3-hydroxylbenzyl alcohol<br>3 2-hydroxylbenzyl alcohol |



## Waters $\mu$ bondapak C18 10 $\mu$ 300 x 3.9mm

|                  |   |                                                                                          |
|------------------|---|------------------------------------------------------------------------------------------|
| Mobile Phase     | : | 10/90, v/v Methanol/Buffer<br>(0.015M H <sub>3</sub> PO <sub>4</sub> )                   |
| Flow Rate        | : | 1.0ml/min                                                                                |
| Detection        | : | UV @ 254nm                                                                               |
| Column Temp      | : | 23°C                                                                                     |
| Injection Volume | : | 5 $\mu$ l                                                                                |
| Sample           | : | 1. 4-hydroxylbenzyl alcohol<br>2. 3-hydroxylbenzyl alcohol<br>3 2-hydroxylbenzyl alcohol |



| PART NUMBER                           | DESCRIPTION                                   |
|---------------------------------------|-----------------------------------------------|
| <b>TELOS <math>\mu</math>B C18</b>    |                                               |
| 1700-10-250-046                       | TELOS $\mu$ B C18 10 $\mu$ m 250 x 4.6mmid    |
| 1700-10-150-046                       | TELOS $\mu$ B C18 10 $\mu$ m 150 x 4.6mmid    |
| 1700-10-100-046                       | TELOS $\mu$ B C18 10 $\mu$ m 100 x 4.6mmid    |
| 1700-5-250-046                        | TELOS $\mu$ B C18 5 $\mu$ m 250 x 4.6mmid     |
| 1700-5-150-046                        | TELOS $\mu$ B C18 5 $\mu$ m 150 x 4.6mmid     |
| 1700-5-100-046                        | TELOS $\mu$ B C18 5 $\mu$ m 100 x 4.6mmid     |
| <b>TELOS <math>\mu</math>B Phenyl</b> |                                               |
| 1732-10-250-046                       | TELOS $\mu$ B Phenyl 10 $\mu$ m 250 x 4.6mmid |
| 1732-10-150-046                       | TELOS $\mu$ B Phenyl 10 $\mu$ m 150 x 4.6mmid |
| 1732-10-100-046                       | TELOS $\mu$ B Phenyl 10 $\mu$ m 100 x 4.6mmid |
| 1732-5-250-046                        | TELOS $\mu$ B Phenyl 5 $\mu$ m 250 x 4.6mmid  |
| 1732-5-150-046                        | TELOS $\mu$ B Phenyl 5 $\mu$ m 150 x 4.6mmid  |
| 1732-5-100-046                        | TELOS $\mu$ B Phenyl 5 $\mu$ m 100 x 4.6mmid  |

| PART NUMBER                          | DESCRIPTION                                  |
|--------------------------------------|----------------------------------------------|
| <b>TELOS <math>\mu</math>B Cyano</b> |                                              |
| 1600-5-250-046                       | TELOS $\mu$ B Cyano 10 $\mu$ m 250 x 4.6mmid |
| 1600-5-150-046                       | TELOS $\mu$ B Cyano 10 $\mu$ m 150 x 4.6mmid |
| 1600-5-100-046                       | TELOS $\mu$ B Cyano 10 $\mu$ m 100 x 4.6mmid |
| 1600-5-100-046                       | TELOS $\mu$ B Cyano 5 $\mu$ m 250 x 4.6mmid  |
| 1600-3-150-046                       | TELOS $\mu$ B Cyano 5 $\mu$ m 150 x 4.6mmid  |
| 1600-3-100-046                       | TELOS $\mu$ B Cyano 5 $\mu$ m 100 x 4.6mmid  |
| <b>TELOS <math>\mu</math>B NH2</b>   |                                              |
| 1742-10-250-046                      | TELOS $\mu$ B NH2 10 $\mu$ m 250 x 4.6mmid   |
| 1742-10-150-046                      | TELOS $\mu$ B NH2 10 $\mu$ m 150 x 4.6mmid   |
| 1742-10-100-046                      | TELOS $\mu$ B NH2 10 $\mu$ m 100 x 4.6mmid   |
| 1742-5-250-046                       | TELOS $\mu$ B NH2 5 $\mu$ m 250 x 4.6mmid    |
| 1742-5-150-046                       | TELOS $\mu$ B NH2 5 $\mu$ m 150 x 4.6mmid    |
| 1742-5-100-046                       | TELOS $\mu$ B NH2 5 $\mu$ m 100 x 4.6mmid    |

# TELOS AT

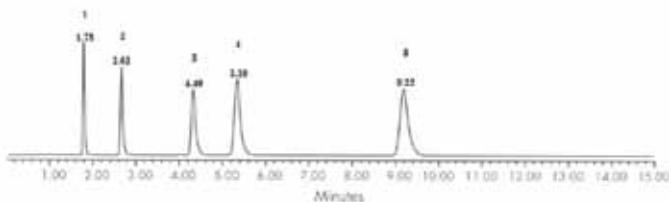
The TELOS AT Commercial Equivalent Media range is a replacement for Waters Atlantis.

- **TELOS AT - available in 3 and 5µm particle sizes**
- **TELOS AT - available in HILIC Silica, dC18 and t3C18 bonded phases**
- **Ideal for LC/MS gradient R&D**

Long column lifetimes with consistent reproducibility are standard for the TELOS Commercial Equivalent Media Columns, and more importantly, excellent efficiencies, peak shape and resolution are obtained for all Waters Atlantis HPLC applications.

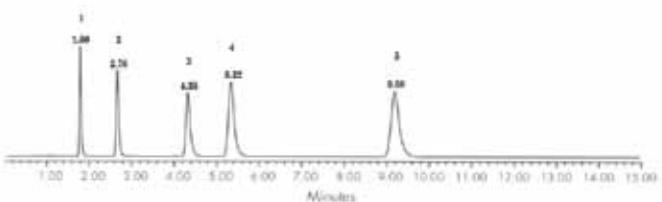
## TELOS AT dC18 5µm 150 x 4.6mm

|                  |   |                                                                                                |
|------------------|---|------------------------------------------------------------------------------------------------|
| Mobile Phase     | : | 10mM Ammonium Formate pH = 3.0                                                                 |
| Flow Rate        | : | 1.0ml/min                                                                                      |
| Detection        | : | UV @ 254nm                                                                                     |
| Column Temp      | : | 23°C                                                                                           |
| Injection Volume | : | 5µl                                                                                            |
| Sample           | : | 1. Thiourea<br>2. 5-Fluorocytosine<br>3. Adenine<br>4. Guanosine-5-monophosphate<br>5. Thymine |



## Waters Atlantis dC18 5µm 150 x 4.6mm

|                  |   |                                                                                                |
|------------------|---|------------------------------------------------------------------------------------------------|
| Mobile Phase     | : | 110mM Ammonium Formate pH = 3.0                                                                |
| Flow Rate        | : | 1.0ml/min                                                                                      |
| Detection        | : | UV @ 254nm                                                                                     |
| Column Temp      | : | 23°C                                                                                           |
| Injection Volume | : | 5µl                                                                                            |
| Sample           | : | 1. Thiourea<br>2. 5-Fluorocytosine<br>3. Adenine<br>4. Guanosine-5-monophosphate<br>5. Thymine |



### PART NUMBER

#### TELOS AT

|                |                                 |
|----------------|---------------------------------|
| 1811-5-250-046 | TELOS AT dC18 5µm 250 x 4.6mmid |
| 1811-5-150-046 | TELOS AT dC18 5µm 150 x 4.6mmid |
| 1811-5-100-046 | TELOS AT dC18 5µm 100 x 4.6mmid |
| 1811-3-150-046 | TELOS AT dC18 3µm 150 x 4.6mmid |
| 1811-3-100-046 | TELOS AT dC18 3µm 100 x 4.6mmid |

#### TELOS AT T3 C18

|                |                                   |
|----------------|-----------------------------------|
| 1810-5-250-046 | TELOS AT T3 C18 5µm 250 x 4.6mmid |
| 1810-5-150-046 | TELOS AT T3 C18 5µm 150 x 4.6mmid |

### PART NUMBER

#### TELOS AT HILIC Silica

|                |                                         |
|----------------|-----------------------------------------|
| 1846-5-250-046 | TELOS AT HILIC Silica 5µm 250 x 4.6mmid |
| 1846-5-150-046 | TELOS AT HILIC Silica 5µm 150 x 4.6mmid |
| 1846-5-100-046 | TELOS AT HILIC Silica 5µm 100 x 4.6mmid |
| 1846-3-150-046 | TELOS AT HILIC Silica 3µm 150 x 4.6mmid |
| 1846-3-100-046 | TELOS AT HILIC Silica 3µm 100 x 4.6mmid |

# TELOS SP

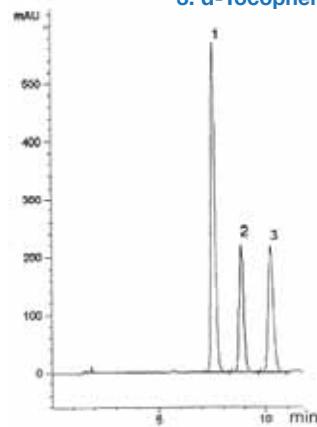
The TELOS SP Commercial Equivalent range is a replacement for Waters Spherisorb.

- **TELOS SP - available in 3, 5 and 10 $\mu$ m particle sizes**
- **TELOS SP - available in Silica, ODS1, ODS2, ODSB, C1, C6, C8, Phenyl, Cyano, Cyano RP, Amino, SAX and SCX bonded phases**
- **TELOS SP exhibits equivalent selectivity to Waters Spherisorb materials**

Long column lifetimes with consistent reproducibility are standard for the TELOS Commercial Equivalent Media Columns, and more importantly, excellent efficiencies, peak shape and resolution are obtained for all Waters Spherisorb HPLC applications. The TELOS SP range of particle sizes provides versatility from capillary and LC/MS to prep and process scale applications.

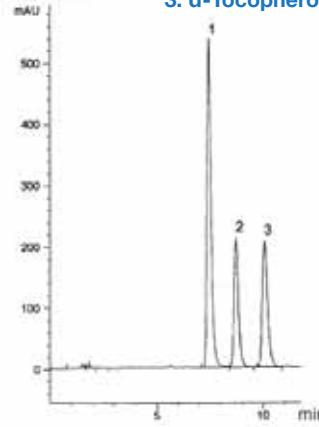
## TELOS SP ODS2 150 x 4.6mm 5 $\mu$ m

Mobile Phase : Acetonitrile/Methanol (85:15, v/v)  
Flow Rate : 1.0ml/min  
Detection : UV @ 295nm  
Column Temp : 23°C  
Injection Volume : 5 $\mu$ l  
Sample : 1.  $\delta$ -Tocopherol  
2.  $\gamma$ -Tocopherol  
3.  $\alpha$ -Tocopherol



## Waters Spherisorb ODS2 5 $\mu$ m 150 x 4.6mm

Mobile Phase : Acetonitrile/Methanol (85:15, v/v)  
Flow Rate : 1.0ml/min  
Detection : UV @ 295nm  
Column Temp : 23°C  
Injection Volume : 5 $\mu$ l  
Sample : 1.  $\delta$ -Tocopherol  
2.  $\gamma$ -Tocopherol  
3.  $\alpha$ -Tocopherol



| PART NUMBER            | DESCRIPTION                              |
|------------------------|------------------------------------------|
| <b>TELOS SP Silica</b> |                                          |
| 1447-10-250-046        | TELOS SP Silica 10 $\mu$ m 250 x 4.6mmid |
| 1447-10-150-046        | TELOS SP Silica 10 $\mu$ m 150 x 4.6mmid |
| 1447-10-100-046        | TELOS SP Silica 10 $\mu$ m 100 x 4.6mmid |
| 1447-5-250-046         | TELOS SP Silica 5 $\mu$ m 250 x 4.6mmid  |
| 1447-5-150-046         | TELOS SP Silica 5 $\mu$ m 150 x 4.6mmid  |
| 1447-5-100-046         | TELOS SP Silica 5 $\mu$ m 100 x 4.6mmid  |
| 1447-3-150-046         | TELOS SP Silica 3 $\mu$ m 150 x 4.6mmid  |
| 1447-3-100-046         | TELOS SP Silica 3 $\mu$ m 100 x 4.6mmid  |
| <b>TELOS SP ODS2</b>   |                                          |
| 1405-10-250-046        | TELOS SP ODS2 10 $\mu$ m 250 x 4.6mmid   |
| 1405-10-150-046        | TELOS SP ODS2 10 $\mu$ m 150 x 4.6mmid   |
| 1405-10-100-046        | TELOS SP ODS2 10 $\mu$ m 100 x 4.6mmid   |
| 1405-5-250-046         | TELOS SP ODS2 5 $\mu$ m 250 x 4.6mmid    |
| 1405-5-150-046         | TELOS SP ODS2 5 $\mu$ m 150 x 4.6mmid    |
| 1405-5-100-046         | TELOS SP ODS2 5 $\mu$ m 100 x 4.6mmid    |
| 1405-3-150-046         | TELOS SP ODS2 3 $\mu$ m 150 x 4.6mmid    |
| 1405-3-100-046         | TELOS SP ODS2 3 $\mu$ m 100 x 4.6mmid    |
| <b>TELOS SP ODS</b>    |                                          |
| 1403-10-250-046        | TELOS SP ODS 10 $\mu$ m 250 x 4.6mmid    |
| 1403-10-150-046        | TELOS SP ODS 10 $\mu$ m 150 x 4.6mmid    |
| 1403-10-100-046        | TELOS SP ODS 10 $\mu$ m 100 x 4.6mmid    |
| 1403-5-250-046         | TELOS SP ODS 5 $\mu$ m 250 x 4.6mmid     |
| 1403-5-150-046         | TELOS SP ODS 5 $\mu$ m 150 x 4.6mmid     |
| 1403-5-100-046         | TELOS SP ODS 5 $\mu$ m 100 x 4.6mmid     |

| PART NUMBER          | DESCRIPTION                           |
|----------------------|---------------------------------------|
| 1403-3-150-046       | TELOS SP ODS 3 $\mu$ m 150 x 4.6mmid  |
| 1403-3-100-046       | TELOS SP ODS 3 $\mu$ m 100 x 4.6mmid  |
| <b>TELOS SP ODSB</b> |                                       |
| 1413-5-250-046       | TELOS SP ODSB 5 $\mu$ m 250 x 4.6mmid |
| 1413-5-150-046       | TELOS SP ODSB 5 $\mu$ m 150 x 4.6mmid |
| 1413-5-100-046       | TELOS SP ODSB 5 $\mu$ m 100 x 4.6mmid |
| <b>TELOS SP C8</b>   |                                       |
| 1419-10-250-046      | TELOS SP C8 10 $\mu$ m 250 x 4.6mmid  |
| 1419-10-150-046      | TELOS SP C8 10 $\mu$ m 150 x 4.6mmid  |
| 1419-10-100-046      | TELOS SP C8 10 $\mu$ m 100 x 4.6mmid  |
| 1419-5-250-046       | TELOS SP C8 5 $\mu$ m 250 x 4.6mmid   |
| 1419-5-150-046       | TELOS SP C8 5 $\mu$ m 150 x 4.6mmid   |
| 1419-5-100-046       | TELOS SP C8 5 $\mu$ m 100 x 4.6mmid   |
| 1419-3-150-046       | TELOS SP C8 3 $\mu$ m 150 x 4.6mmid   |
| 1419-3-100-046       | TELOS SP C8 3 $\mu$ m 100 x 4.6mmid   |
| <b>TELOS SP C6</b>   |                                       |
| 1426-10-250-046      | TELOS SP C6 10 $\mu$ m 250 x 4.6mmid  |
| 1426-10-150-046      | TELOS SP C6 10 $\mu$ m 150 x 4.6mmid  |
| 1426-10-100-046      | TELOS SP C6 10 $\mu$ m 100 x 4.6mmid  |
| 1426-5-250-046       | TELOS SP C6 5 $\mu$ m 250 x 4.6mmid   |
| 1426-5-150-046       | TELOS SP C6 5 $\mu$ m 150 x 4.6mmid   |
| 1426-5-100-046       | TELOS SP C6 5 $\mu$ m 100 x 4.6mmid   |
| 1426-3-150-046       | TELOS SP C6 3 $\mu$ m 150 x 4.6mmid   |
| 1426-3-100-046       | TELOS SP C6 3 $\mu$ m 100 x 4.6mmid   |

| PART NUMBER             | DESCRIPTION                         |
|-------------------------|-------------------------------------|
| <b>TELOS SP C1</b>      |                                     |
| 1430-10-250-046         | TELOS SP C1 10µm 250 x 4.6mmid      |
| 1430-10-150-046         | TELOS SP C1 10µm 150 x 4.6mmid      |
| 1430-10-100-046         | TELOS SP C1 10µm 100 x 4.6mmid      |
| 1430-5-250-046          | TELOS SP C1 5µm 250 x 4.6mmid       |
| 1430-5-150-046          | TELOS SP C1 5µm 150 x 4.6mmid       |
| 1430-5-100-046          | TELOS SP C1 5µm 100 x 4.6mmid       |
| 1430-3-150-046          | TELOS SP C1 3µm 150 x 4.6mmid       |
| 1430-3-100-046          | TELOS SP C1 3µm 100 x 4.6mmid       |
| <b>TELOS SP Nitrile</b> |                                     |
| 1438-10-250-046         | TELOS SP Nitrile 10µm 250 x 4.6mmid |
| 1438-10-150-046         | TELOS SP Nitrile 10µm 150 x 4.6mmid |
| 1438-10-100-046         | TELOS SP Nitrile 10µm 100 x 4.6mmid |
| 1438-5-250-046          | TELOS SP Nitrile 5µm 250 x 4.6mmid  |
| 1438-5-150-046          | TELOS SP Nitrile 5µm 150 x 4.6mmid  |
| 1438-5-100-046          | TELOS SP Nitrile 5µm 100 x 4.6mmid  |
| 1438-3-150-046          | TELOS SP Nitrile 3µm 150 x 4.6mmid  |
| 1438-3-100-046          | TELOS SP Nitrile 3µm 100 x 4.6mmid  |
| <b>TELOS SP Amino</b>   |                                     |
| 1442-10-250-046         | TELOS SP Amino 10µm 250 x 4.6mmid   |
| 1442-10-150-046         | TELOS SP Amino 10µm 150 x 4.6mmid   |
| 1442-10-100-046         | TELOS SP Amino 10µm 100 x 4.6mmid   |
| 1442-5-250-046          | TELOS SP Amino 5µm 250 x 4.6mmid    |
| 1442-5-150-046          | TELOS SP Amino 5µm 150 x 4.6mmid    |
| 1442-5-100-046          | TELOS SP Amino 5µm 100 x 4.6mmid    |
| 1442-3-150-046          | TELOS SP Amino 3µm 150 x 4.6mmid    |
| 1442-3-100-046          | TELOS SP Amino 3µm 100 x 4.6mmid    |

| PART NUMBER            | DESCRIPTION                        |
|------------------------|------------------------------------|
| <b>TELOS SP Phenyl</b> |                                    |
| 1432-10-250-046        | TELOS SP Phenyl 10µm 250 x 4.6mmid |
| 1432-10-150-046        | TELOS SP Phenyl 10µm 150 x 4.6mmid |
| 1432-10-100-046        | TELOS SP Phenyl 10µm 100 x 4.6mmid |
| 1432-5-250-046         | TELOS SP Phenyl 5µm 250 x 4.6mmid  |
| 1432-5-150-046         | TELOS SP Phenyl 5µm 150 x 4.6mmid  |
| 1432-5-100-046         | TELOS SP Phenyl 5µm 100 x 4.6mmid  |
| 1432-3-150-046         | TELOS SP Phenyl 3µm 150 x 4.6mmid  |
| 1432-3-100-046         | TELOS SP Phenyl 3µm 100 x 4.6mmid  |
| <b>TELOS SP SAX</b>    |                                    |
| 1444-10-250-046        | TELOS SP SAX 10µm 250 x 4.6mmid    |
| 1444-10-150-046        | TELOS SP SAX 10µm 150 x 4.6mmid    |
| 1444-10-100-046        | TELOS SP SAX 10µm 100 x 4.6mmid    |
| 1444-5-250-046         | TELOS SP SAX 5µm 250 x 4.6mmid     |
| 1444-5-150-046         | TELOS SP SAX 5µm 150 x 4.6mmid     |
| 1444-5-100-046         | TELOS SP SAX 5µm 100 x 4.6mmid     |
| <b>TELOS SP SCX</b>    |                                    |
| 1445-10-250-046        | TELOS SP SCX 10µm 250 x 4.6mmid    |
| 1445-10-150-046        | TELOS SP SCX 10µm 150 x 4.6mmid    |
| 1445-10-100-046        | TELOS SP SCX 10µm 100 x 4.6mmid    |
| 1445-5-250-046         | TELOS SP SCX 5µm 250 x 4.6mmid     |
| 1445-5-150-046         | TELOS SP SCX 5µm 150 x 4.6mmid     |
| 1445-5-100-046         | TELOS SP SCX 5µm 100 x 4.6mmid     |

# TELOS IN

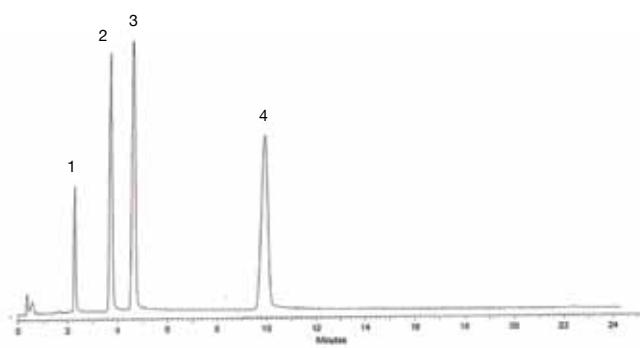
The TELOS IN Commercial Equivalent Media range is a replacement for GL Sciences Inertsil.

- **TELOS IN - available in 3 and 5µm particle sizes in the 100Å pore size and ODS3 bonded phase**
- **TELOS IN - available in 5µm particle sizes in the 150Å pore size and C8, ODS2 and Phenyl bonded phases**

Long column lifetimes with consistent reproducibility are standard for the TELOS Commercial Equivalent Media Columns, and more importantly, excellent efficiencies, peak shape and resolution are obtained for all GL Sciences Inertsil applications.

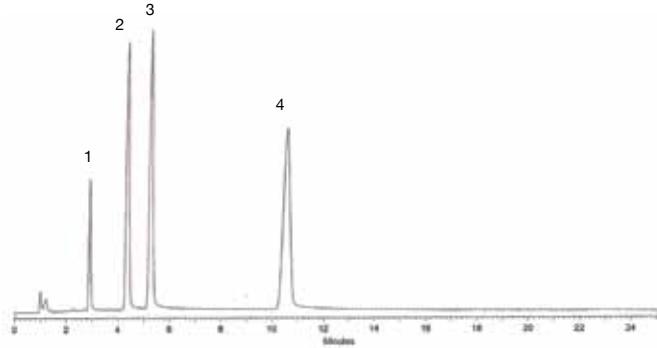
## TELOS IN ODS3 5µm 150 x 4.6mm

Mobile Phase : 50/50, v/v Acetonitrile / 0.1M Ammonium Hydrogen Carbonate pH = 10  
Detection : UV @ 254nm  
Oven Temperature: 25°C  
Injection Volume : 5µl  
Sample :  
1. Aniline  
2. 4-Chloroaniline  
3. N,Methylaniline  
4. N,N Dimethylaniline



## Inertsil ODS3 5µm 150 x 4.6mm

Mobile Phase : 50/50, v/v Acetonitrile / 0.1M Ammonium Hydrogen Carbonate pH = 10  
Detection : UV @ 254nm  
Oven Temperature: 25°C  
Injection Volume : 5µl  
Sample :  
1. Aniline  
2. 4-Chloroaniline  
3. N,Methylaniline  
4. N,N Dimethylaniline



| PART NUMBER          | DESCRIPTION                     |
|----------------------|---------------------------------|
| <b>TELOS IN ODS2</b> |                                 |
| 1905-5-250-046       | TELOS IN ODS2 5µm 250 x 4.6mmid |
| 1905-5-150-046       | TELOS IN ODS2 5µm 150 x 4.6mmid |
| 1905-5-100-046       | TELOS IN ODS2 5µm 100 x 4.6mmid |
| <b>TELOS IN ODS3</b> |                                 |
| 1906-5-250-046       | TELOS IN ODS3 5µm 250 x 4.6mmid |
| 1906-5-150-046       | TELOS IN ODS3 5µm 150 x 4.6mmid |
| 1906-5-100-046       | TELOS IN ODS3 5µm 100 x 4.6mmid |
| 1906-3-150-046       | TELOS IN ODS3 3µm 150 x 4.6mmid |
| 1906-3-100-046       | TELOS IN ODS3 3µm 100 x 4.6mmid |

| PART NUMBER            | DESCRIPTION                       |
|------------------------|-----------------------------------|
| <b>TELOS IN C8</b>     |                                   |
| 1919-5-250-046         | TELOS IN C8 5µm 250 x 4.6mmid     |
| 1919-5-150-046         | TELOS IN C8 5µm 150 x 4.6mmid     |
| 1919-5-100-046         | TELOS IN C8 5µm 100 x 4.6mmid     |
| <b>TELOS IN Phenyl</b> |                                   |
| 1932-5-250-046         | TELOS IN Phenyl 5µm 250 x 4.6mmid |
| 1932-5-150-046         | TELOS IN Phenyl 5µm 150 x 4.6mmid |
| 1932-5-100-046         | TELOS IN Phenyl 5µm 100 x 4.6mmid |

# TELOS HY, TELOS HY BDS AND TELOS HY GOLD

The TELOS HY, TELOS HY BDS and TELOS HY GOLD Commercial Equivalent Media ranges are replacements for Thermo Hypersil, Thermo Hypersil BDS and Thermo Hypersil GOLD respectively.

- **TELOS HY** - available in 3, 5 and 10 $\mu$ m particle sizes and ODS, ODS2, MOS, MOS2, SAS, Phenyl, Phenyl 2, CPS, CPS2 and APS2 bonded phases
- **TELOS HY BDS** - available in 3 and 5 $\mu$ m particle sizes and C8, C18, Cyano and Phenyl bonded phases
- **TELOS HY GOLD** – available in 1.8, 3 and 5 $\mu$ m particle sizes and C8, C18, AQ, PFP, Cyano and Phenyl bonded phases
- **TELOS HY, TELOS HY BDS and TELOS HY GOLD** exhibit equivalent selectivity to Thermo Hypersil, Thermo Hypersil BDS and Thermo Hypersil GOLD

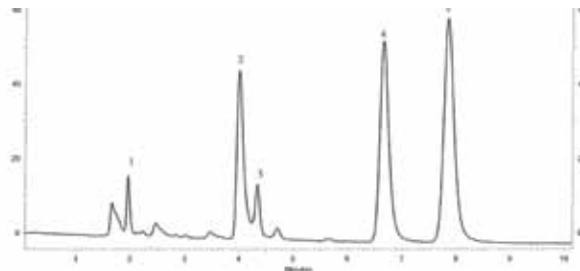
Long column lifetimes with consistent reproducibility are standard for the TELOS Commercial Equivalent Media Columns, and more importantly, excellent efficiencies, peak shape and resolution are obtained for all Thermo Hypersil, Thermo Hypersil BDS and Thermo Hypersil GOLD HPLC applications.

## TELOS HY GOLD

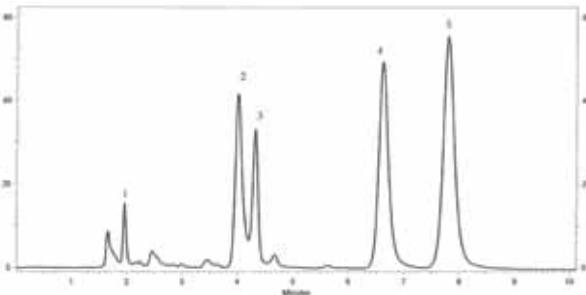
| PART NUMBER              | DESCRIPTION                                 |
|--------------------------|---------------------------------------------|
| <b>TELOS HY GOLD C18</b> |                                             |
| 1109-5-250-046           | TELOS HY Gold C18 5 $\mu$ m 250 x 4.6mmid   |
| 1109-5-150-046           | TELOS HY Gold C18 5 $\mu$ m 150 x 4.6mmid   |
| 1109-5-100-046           | TELOS HY Gold C18 5 $\mu$ m 100 x 4.6mmid   |
| 1109-3-150-046           | TELOS HY Gold C18 3 $\mu$ m 150 x 4.6mmid   |
| 1109-3-100-046           | TELOS HY Gold C18 3 $\mu$ m 100 x 4.6mmid   |
| 1109-2-100-021           | TELOS HY Gold C18 1.8 $\mu$ m 100 x 2.1mmid |
| 1109-2-050-021           | TELOS HY Gold C18 1.8 $\mu$ m 50 x 2.1mmid  |
| <b>TELOS HY GOLD C8</b>  |                                             |
| 1122-5-250-046           | TELOS HY Gold C8 5 $\mu$ m 250 x 4.6mmid    |
| 1122-5-150-046           | TELOS HY Gold C8 5 $\mu$ m 150 x 4.6mmid    |
| 1122-5-100-046           | TELOS HY Gold C8 5 $\mu$ m 100 x 4.6mmid    |
| 1122-3-150-046           | TELOS HY Gold C8 3 $\mu$ m 150 x 4.6mmid    |
| 1122-3-100-046           | TELOS HY Gold C8 3 $\mu$ m 100 x 4.6mmid    |
| 1122-2-100-021           | TELOS HY Gold C8 1.8 $\mu$ m 100 x 2.1mmid  |
| 1122-2-050-021           | TELOS HY Gold C8 1.8 $\mu$ m 50 x 2.1mmid   |
| <b>TELOS HY GOLD AQ</b>  |                                             |
| 1116-5-250-046           | TELOS HY Gold AQ 5 $\mu$ m 250 x 4.6mmid    |
| 1116-5-150-046           | TELOS HY Gold AQ 5 $\mu$ m 150 x 4.6mmid    |
| 1116-5-100-046           | TELOS HY Gold AQ 5 $\mu$ m 100 x 4.6mmid    |
| 1116-3-150-046           | TELOS HY Gold AQ 3 $\mu$ m 150 x 4.6mmid    |
| 1116-3-100-046           | TELOS HY Gold AQ 3 $\mu$ m 100 x 4.6mmid    |
| 1116-2-100-021           | TELOS HY Gold AQ 1.8 $\mu$ m 100 x 2.1mmid  |
| 1116-2-050-021           | TELOS HY Gold AQ 1.8 $\mu$ m 50 x 2.1mmid   |

|                  |                                                                                          |
|------------------|------------------------------------------------------------------------------------------|
| Mobile Phase     | : 80/20, v/v Methanol/Buffer (20mM Potassium Phosphate pH=7)                             |
| Flow Rate        | : 1.0ml/min                                                                              |
| Detection        | : UV @ 225nm                                                                             |
| Column Temp      | : 23°C                                                                                   |
| Injection Volume | : 5 $\mu$ l                                                                              |
| Sample           | : 1. Norephedrine<br>2. Nortriptyline<br>3. Toluene<br>4. Imipramine<br>5. Amitriptyline |

**TELOS HY BDS C18 5 $\mu$ m 150 x 4.6mm**



**Hypersil BDS C18 5 $\mu$ m 150 x 4.6mm**



| PART NUMBER              | DESCRIPTION                                    |
|--------------------------|------------------------------------------------|
| <b>TELOS HY GOLD C18</b> |                                                |
| 1118-5-250-046           | TELOS HY Gold PFP 5 $\mu$ m 250 x 4.6mmid      |
| 1118-5-150-046           | TELOS HY Gold PFP 5 $\mu$ m 150 x 4.6mmid      |
| 1118-5-100-046           | TELOS HY Gold PFP 5 $\mu$ m 100 x 4.6mmid      |
| 1118-3-150-046           | TELOS HY Gold PFP 3 $\mu$ m 150 x 4.6mmid      |
| 1118-3-100-046           | TELOS HY Gold PFP 3 $\mu$ m 100 x 4.6mmid      |
| 1118-2-100-021           | TELOS HY Gold PFP 1.8 $\mu$ m 100 x 2.1mmid    |
| 1118-2-050-021           | TELOS HY Gold PFP 1.8 $\mu$ m 50 x 2.1mmid     |
| <b>TELOS HY GOLD C8</b>  |                                                |
| 1140-5-250-046           | TELOS HY Gold Cyano 5 $\mu$ m 250 x 4.6mmid    |
| 1140-5-150-046           | TELOS HY Gold Cyano 5 $\mu$ m 150 x 4.6mmid    |
| 1140-5-100-046           | TELOS HY Gold Cyano 5 $\mu$ m 100 x 4.6mmid    |
| 1140-3-150-046           | TELOS HY Gold Cyano 3 $\mu$ m 150 x 4.6mmid    |
| 1140-3-100-046           | TELOS HY Gold Cyano 3 $\mu$ m 100 x 4.6mmid    |
| 1140-2-100-021           | TELOS HY Gold Cyano 1.8 $\mu$ m 100 x 2.1mmid  |
| 1140-2-050-021           | TELOS HY Gold Cyano 1.8 $\mu$ m 50 x 2.1mmid   |
| <b>TELOS HY GOLD AQ</b>  |                                                |
| 1133-5-250-046           | TELOS HY Gold Phenyl 5 $\mu$ m 250 x 4.6mmid   |
| 1133-5-150-046           | TELOS HY Gold Phenyl 5 $\mu$ m 150 x 4.6mmid   |
| 1133-5-100-046           | TELOS HY Gold Phenyl 5 $\mu$ m 100 x 4.6mmid   |
| 1133-3-150-046           | TELOS HY Gold Phenyl 3 $\mu$ m 150 x 4.6mmid   |
| 1133-3-100-046           | TELOS HY Gold Phenyl 3 $\mu$ m 100 x 4.6mmid   |
| 1133-2-100-021           | TELOS HY Gold Phenyl 1.8 $\mu$ m 100 x 2.1mmid |
| 1133-2-050-021           | TELOS HY Gold Phenyl 1.8 $\mu$ m 50 x 2.1mmid  |

## TELOS HY BDS

| PART NUMBER             | DESCRIPTION                        |
|-------------------------|------------------------------------|
| <b>TELOS HY BDS C18</b> |                                    |
| 1114-5-250-046          | TELOS HY BDS C18 5µm 250 x 4.6mmid |
| 1114-5-150-046          | TELOS HY BDS C18 5µm 150 x 4.6mmid |
| 1114-5-100-046          | TELOS HY BDS C18 5µm 100 x 4.6mmid |
| 1114-3-150-046          | TELOS HY BDS C18 3µm 150 x 4.6mmid |
| 1114-3-100-046          | TELOS HY BDS C18 3µm 100 x 4.6mmid |
| <b>TELOS HY BDS C8</b>  |                                    |
| 1125-5-250-046          | TELOS HY BDS C8 5µm 250 x 4.6mmid  |
| 1125-5-150-046          | TELOS HY BDS C8 5µm 150 x 4.6mmid  |
| 1125-5-100-046          | TELOS HY BDS C8 5µm 100 x 4.6mmid  |
| 1125-3-150-046          | TELOS HY BDS C8 3µm 150 x 4.6mmid  |
| 1125-3-100-046          | TELOS HY BDS C8 3µm 100 x 4.6mmid  |

## TELOS HY

| PART NUMBER            | DESCRIPTION                        |
|------------------------|------------------------------------|
| <b>TELOS HY ODS</b>    |                                    |
| 1103-10-250-046        | TELOS HY ODS 10µm 250 x 4.6mmid    |
| 1103-10-150-046        | TELOS HY ODS 10µm 150 x 4.6mmid    |
| 1103-10-100-046        | TELOS HY ODS 10µm 100 x 4.6mmid    |
| 1103-5-250-046         | TELOS HY ODS 5µm 250 x 4.6mmid     |
| 1103-5-150-046         | TELOS HY ODS 5µm 150 x 4.6mmid     |
| 1103-5-100-046         | TELOS HY ODS 5µm 100 x 4.6mmid     |
| 1103-3-150-046         | TELOS HY ODS 3µm 150 x 4.6mmid     |
| 1103-3-100-046         | TELOS HY ODS 3µm 100 x 4.6mmid     |
| <b>TELOS HY ODS2</b>   |                                    |
| 1105-5-250-046         | TELOS HY ODS2 5µm 250 x 4.6mmid    |
| 1105-5-150-046         | TELOS HY ODS2 5µm 150 x 4.6mmid    |
| 1105-5-100-046         | TELOS HY ODS2 5µm 100 x 4.6mmid    |
| 1105-3-150-046         | TELOS HY ODS2 3µm 150 x 4.6mmid    |
| 1105-3-100-046         | TELOS HY ODS2 3µm 100 x 4.6mmid    |
| <b>TELOS HY MOS</b>    |                                    |
| 1123-10-250-046        | TELOS HY MOS 10µm 250 x 4.6mmid    |
| 1123-10-150-046        | TELOS HY MOS 10µm 150 x 4.6mmid    |
| 1123-10-100-046        | TELOS HY MOS 10µm 100 x 4.6mmid    |
| 1123-5-250-046         | TELOS HY MOS 5µm 250 x 4.6mmid     |
| 1123-5-150-046         | TELOS HY MOS 5µm 150 x 4.6mmid     |
| 1123-5-100-046         | TELOS HY MOS 5µm 100 x 4.6mmid     |
| 1123-3-150-046         | TELOS HY MOS 3µm 150 x 4.6mmid     |
| 1123-3-100-046         | TELOS HY MOS 3µm 100 x 4.6mmid     |
| <b>TELOS HY MOS2</b>   |                                    |
| 1124-10-250-046        | TELOS HY MOS2 10µm 250 x 4.6mmid   |
| 1124-10-150-046        | TELOS HY MOS2 10µm 150 x 4.6mmid   |
| 1124-10-100-046        | TELOS HY MOS2 10µm 100 x 4.6mmid   |
| 1124-5-250-046         | TELOS HY MOS2 5µm 250 x 4.6mmid    |
| 1124-5-150-046         | TELOS HY MOS2 5µm 150 x 4.6mmid    |
| 1124-5-100-046         | TELOS HY MOS2 5µm 100 x 4.6mmid    |
| 1124-3-150-046         | TELOS HY MOS2 3µm 150 x 4.6mmid    |
| 1124-3-100-046         | TELOS HY MOS2 3µm 100 x 4.6mmid    |
| <b>TELOS HY SAS</b>    |                                    |
| 1131-10-250-046        | TELOS HY SAS 10µm 250 x 4.6mmid    |
| 1131-10-150-046        | TELOS HY SAS 10µm 150 x 4.6mmid    |
| 1131-10-100-046        | TELOS HY SAS 10µm 100 x 4.6mmid    |
| 1131-5-250-046         | TELOS HY SAS 5µm 250 x 4.6mmid     |
| 1131-5-150-046         | TELOS HY SAS 5µm 150 x 4.6mmid     |
| 1131-5-100-046         | TELOS HY SAS 5µm 100 x 4.6mmid     |
| 1131-3-150-046         | TELOS HY SAS 3µm 150 x 4.6mmid     |
| 1131-3-100-046         | TELOS HY SAS 3µm 100 x 4.6mmid     |
| <b>TELOS HY Phenyl</b> |                                    |
| 1132-10-250-046        | TELOS HY Phenyl 10µm 250 x 4.6mmid |
| 1132-10-150-046        | TELOS HY Phenyl 10µm 150 x 4.6mmid |
| 1132-10-100-046        | TELOS HY Phenyl 10µm 100 x 4.6mmid |
| 1132-5-250-046         | TELOS HY Phenyl 5µm 250 x 4.6mmid  |
| 1132-5-150-046         | TELOS HY Phenyl 5µm 150 x 4.6mmid  |

| PART NUMBER                | DESCRIPTION                           |
|----------------------------|---------------------------------------|
| <b>TELOS HY BDS Phenyl</b> |                                       |
| 1134-5-250-046             | TELOS HY BDS Phenyl 5µm 250 x 4.6mmid |
| 1134-5-150-046             | TELOS HY BDS Phenyl 5µm 150 x 4.6mmid |
| 1134-5-100-046             | TELOS HY BDS Phenyl 5µm 100 x 4.6mmid |
| 1134-3-150-046             | TELOS HY BDS Phenyl 3µm 150 x 4.6mmid |
| 1134-3-100-046             | TELOS HY BDS Phenyl 3µm 100 x 4.6mmid |
| <b>TELOS HY BDS C8</b>     |                                       |
| 1141-5-250-046             | TELOS HY BDS Cyano 5µm 250 x 4.6mmid  |
| 1141-5-150-046             | TELOS HY BDS Cyano 5µm 150 x 4.6mmid  |
| 1141-5-100-046             | TELOS HY BDS Cyano 5µm 100 x 4.6mmid  |
| 1141-3-150-046             | TELOS HY BDS Cyano 3µm 150 x 4.6mmid  |
| 1141-3-100-046             | TELOS HY BDS Cyano 3µm 100 x 4.6mmid  |

| PART NUMBER              | DESCRIPTION                          |
|--------------------------|--------------------------------------|
| <b>TELOS HY Phenyl</b>   |                                      |
| 1132-5-100-046           | TELOS HY Phenyl 5µm 100 x 4.6mmid    |
| 1132-3-150-046           | TELOS HY Phenyl 3µm 150 x 4.6mmid    |
| 1132-3-100-046           | TELOS HY Phenyl 3µm 100 x 4.6mmid    |
| <b>TELOS HY Phenyl-2</b> |                                      |
| 1135-10-250-046          | TELOS HY Phenyl-2 10µm 250 x 4.6mmid |
| 1135-10-150-046          | TELOS HY Phenyl-2 10µm 150 x 4.6mmid |
| 1135-10-100-046          | TELOS HY Phenyl-2 10µm 100 x 4.6mmid |
| 1135-5-250-046           | TELOS HY Phenyl-2 5µm 250 x 4.6mmid  |
| 1135-5-150-046           | TELOS HY Phenyl-2 5µm 150 x 4.6mmid  |
| 1135-5-100-046           | TELOS HY Phenyl-2 5µm 100 x 4.6mmid  |
| <b>TELOS HY CPS</b>      |                                      |
| 1138-10-250-046          | TELOS HY CPS 10µm 250 x 4.6mmid      |
| 1138-10-150-046          | TELOS HY CPS 10µm 150 x 4.6mmid      |
| 1138-10-100-046          | TELOS HY CPS 10µm 100 x 4.6mmid      |
| 1138-5-250-046           | TELOS HY CPS 5µm 250 x 4.6mmid       |
| 1138-5-150-046           | TELOS HY CPS 5µm 150 x 4.6mmid       |
| 1138-5-100-046           | TELOS HY CPS 5µm 100 x 4.6mmid       |
| 1138-3-150-046           | TELOS HY CPS 3µm 150 x 4.6mmid       |
| 1138-3-100-046           | TELOS HY CPS 3µm 100 x 4.6mmid       |
| <b>TELOS HY CPS-2</b>    |                                      |
| 1139-10-250-046          | TELOS HY CPS-2 10µm 250 x 4.6mmid    |
| 1139-10-150-046          | TELOS HY CPS-2 10µm 150 x 4.6mmid    |
| 1139-10-100-046          | TELOS HY CPS-2 10µm 100 x 4.6mmid    |
| 1139-5-250-046           | TELOS HY CPS-2 5µm 250 x 4.6mmid     |
| 1139-5-150-046           | TELOS HY CPS-2 5µm 150 x 4.6mmid     |
| 1139-5-100-046           | TELOS HY CPS-2 5µm 100 x 4.6mmid     |
| <b>TELOS HY APS-2</b>    |                                      |
| 1143-10-250-046          | TELOS HY APS-2 10µm 250 x 4.6mmid    |
| 1143-10-150-046          | TELOS HY APS-2 10µm 150 x 4.6mmid    |
| 1143-10-100-046          | TELOS HY APS-2 10µm 100 x 4.6mmid    |
| 1143-5-250-046           | TELOS HY APS-2 5µm 250 x 4.6mmid     |
| 1143-5-150-046           | TELOS HY APS-2 5µm 150 x 4.6mmid     |
| 1143-5-100-046           | TELOS HY APS-2 5µm 100 x 4.6mmid     |
| 1143-3-150-046           | TELOS HY APS-2 3µm 150 x 4.6mmid     |
| 1143-3-100-046           | TELOS HY APS-2 3µm 100 x 4.6mmid     |
| <b>TELOS HY Silica</b>   |                                      |
| 1147-10-250-046          | TELOS HY Silica 10µm 250 x 4.6mmid   |
| 1147-10-150-046          | TELOS HY Silica 10µm 150 x 4.6mmid   |
| 1147-10-100-046          | TELOS HY Silica 10µm 100 x 4.6mmid   |
| 1147-5-250-046           | TELOS HY Silica 5µm 250 x 4.6mmid    |
| 1147-5-150-046           | TELOS HY Silica 5µm 150 x 4.6mmid    |
| 1147-5-100-046           | TELOS HY Silica 5µm 100 x 4.6mmid    |
| 1147-3-150-046           | TELOS HY Silica 3µm 150 x 4.6mmid    |
| 1147-3-100-046           | TELOS HY Silica 3µm 100 x 4.6mmid    |
| <b>TELOS HY SAX</b>      |                                      |
| 1144-5-250-046           | TELOS HY SAX 5µm 250 x 4.6mmid       |
| 1144-5-150-046           | TELOS HY SAX 5µm 150 x 4.6mmid       |
| 1144-5-100-046           | TELOS HY SAX 5µm 100 x 4.6mmid       |

# TELOS AC

The TELOS AC Commercial Equivalent Media range is a replacement for ACE.

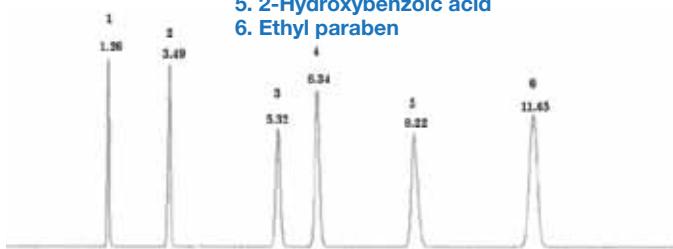
- The TELOS AC Commercial Equivalent Media range is identical to ACE
- TELOS AC - available in AQ, C18, C18 HL, C4, C8, CN and Phenyl bonded phases
- TELOS AC - is manufactured using ultra-pure silica exhibiting extremely low silanol activity
- TELOS AC - columns provide unsurpassed peak shapes and efficiencies even for the most challenging chromatographic applications

Long column lifetimes with consistent reproducibility are standard for the TELOS Commercial Equivalent Media Columns, and more importantly, excellent efficiencies, peak shape and resolution are obtained for all ACE HPLC applications.

## TELOS AC C18 5µm 250 X 4.6mm

**Mobile Phase :** 35/65, v/v Acetonitrile/0.1%, v/v TFA in Water  
**Flow Rate :** 1.0ml/min  
**Detection :** UV @ 254nm  
**Column Temp :** 23°C  
**Injection Volume :** 5µl  
**Sample :**

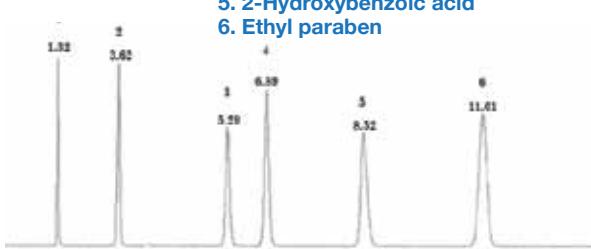
1. Uracil
2. 4-Hydroxybenzoic acid
3. Acetylsalicylic acid
4. Benzoic acid
5. 2-Hydroxybenzoic acid
6. Ethyl paraben



## Advanced Chromatography Technologies ACE C18 5µm 250 X 4.6mm

**Mobile Phase :** 35/65, v/v Acetonitrile/0.1%, v/v TFA in Water  
**Flow Rate :** 1.0ml/min  
**Detection :** UV @ 254nm  
**Column Temp :** 23°C  
**Injection Volume :** 5µl  
**Sample :**

1. Uracil
2. 4-Hydroxybenzoic acid
3. Acetylsalicylic acid
4. Benzoic acid
5. 2-Hydroxybenzoic acid
6. Ethyl paraben



| PART NUMBER            | DESCRIPTION                       |
|------------------------|-----------------------------------|
| <b>TELOS AC AQ</b>     |                                   |
| 1350-5-250-046         | TELOS AC AQ 5µm 250 x 4.6mmid     |
| 1350-5-150-046         | TELOS AC AQ 5µm 150 x 4.6mmid     |
| 1350-5-100-046         | TELOS AC AQ 5µm 100 x 4.6mmid     |
| 1305-5-250-046         | TELOS AC AQ 3µm 150 x 4.6mmid     |
| 1305-5-150-046         | TELOS AC AQ 3µm 100 x 4.6mmid     |
| <b>TELOS AC C18</b>    |                                   |
| 1305-5-100-046         | TELOS AC C18 5µm 250 x 4.6mmid    |
| 1319-5-250-046         | TELOS AC C18 5µm 150 x 4.6mmid    |
| 1319-5-150-046         | TELOS AC C18 5µm 100 x 4.6mmid    |
| 1319-5-100-046         | TELOS AC C18 3µm 150 x 4.6mmid    |
| 1306-10-250-046        | TELOS AC C18 3µm 100 x 4.6mmid    |
| <b>TELOS AC C18 HL</b> |                                   |
| 1306-10-150-046        | TELOS AC C18 HL 5µm 250 x 4.6mmid |
| 1305-5-100-046         | TELOS AC C18 HL 5µm 150 x 4.6mmid |
| 1319-5-250-046         | TELOS AC C18 HL 5µm 100 x 4.6mmid |
| 1319-5-150-046         | TELOS AC C18 HL 3µm 150 x 4.6mmid |
| 1319-5-100-046         | TELOS AC C18 HL 3µm 100 x 4.6mmid |
| <b>TELOS AC C4</b>     |                                   |
| 1306-10-250-046        | TELOS AC C4 5µm 250 x 4.6mmid     |
| 1306-10-150-046        | TELOS AC C4 5µm 150 x 4.6mmid     |

| PART NUMBER            | DESCRIPTION                       |
|------------------------|-----------------------------------|
| <b>TELOS AC C8</b>     |                                   |
| 1019-5-250-046         | TELOS AC C8 5µm 250 x 4.6mmid     |
| 1019-5-150-046         | TELOS AC C8 5µm 150 x 4.6mmid     |
| 1019-5-100-046         | TELOS AC C8 5µm 100 x 4.6mmid     |
| 1019-3-150-046         | TELOS AC C8 3µm 150 x 4.6mmid     |
| 1019-3-100-046         | TELOS AC C8 3µm 100 x 4.6mmid     |
| <b>TELOS AC CN</b>     |                                   |
| 1038-5-250-046         | TELOS AC CN 5µm 250 x 4.6mmid     |
| 1038-5-150-046         | TELOS AC CN 5µm 150 x 4.6mmid     |
| 1038-5-100-046         | TELOS AC CN 5µm 100 x 4.6mmid     |
| 1038-3-150-046         | TELOS AC CN 3µm 150 x 4.6mmid     |
| 1038-3-100-046         | TELOS AC CN 3µm 100 x 4.6mmid     |
| <b>TELOS AC Phenyl</b> |                                   |
| 1032-5-250-046         | TELOS AC Phenyl 5µm 250 x 4.6mmid |
| 1032-5-150-046         | TELOS AC Phenyl 5µm 150 x 4.6mmid |
| 1032-5-100-046         | TELOS AC Phenyl 5µm 100 x 4.6mmid |
| 1032-3-150-046         | TELOS AC Phenyl 3µm 150 x 4.6mmid |
| 1032-3-100-046         | TELOS AC Phenyl 3µm 100 x 4.6mmid |

## 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.



# Global Kinesis

Kinesis is a leading international supplier of chromatography, liquid handling, sample storage and medicinal chemistry consumables and equipment. The company's products are used extensively in the pharmaceutical, environmental, forensic, life sciences, food, biotechnology and academic markets.

A privately owned company, Kinesis was established in 1997 and offers its customers a range of first class products, services and solutions. Kinesis has expanded its reach internationally with subsidiary offices in Australia, Germany and the USA. A network of international distributors ensures the Kinesis range of products is available on a worldwide basis.

Kinesis work with industry leading manufacturers, many on a global exclusive or preferred supplier basis. Key suppliers to the Kinesis Group include AccuStandard, Cerilliant, ChromSword, Corning, Diba Industries, GL Sciences, Hamamatsu, Heraeus, HTL, IDEX Health & Science, Lipomed, Micronic, Microsaic, Parker domnick hunter, SGE Analytical Science, Tosoh Bioscience and YMC.

The Kinesis UK facility houses state of art processes for the pre-alignment of deuterium lamps. Approved by the world's two leading lamp manufacturers, Hamamatsu and Heraeus, these accredited processes have helped Kinesis become the world's largest 3<sup>rd</sup> party provider of pre-aligned deuterium lamps. Pipette service and calibration suites at both the UK and German locations offer back to base or field-based pipette service and calibration. The UK facility is UKAS accredited, offering services in line with today's market requirements.

KLTD-1536-0915



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 **Kinesis**  
Scientific Experts  
[sales@kinesis-group.com](mailto:sales@kinesis-group.com) [kinesis-group.com](http://kinesis-group.com)