



**Your alternative to  
Thermo  
UHPLC and HPLC columns**

The versatile and powerful VDSpher® phases allow for numerous applications in normal and reversed phase as well as HILIC chromatography. Our wide range of phases offers excellent alternatives to Acclaim, Hypersil, Hypersil BDS, Hypersil GOLD and Synchronis. Our recommendations are listed in the following tables. If you don't find the required phase on this list, please contact us to find a similar or alternative product from the wide range of VDSpher® phases.

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# 1. Alternatives to Hypersil GOLD

Thermo	VDSpher®	
Hypersil GOLD	replacement recommendation	comments
Hypersil GOLD, 1.9µm	U-VDSpher® PUR 100 C18-E, 1.8µm	use only in range of pH = 2 to 7.5 higher surface area and higher carbon load → longer retention expected
Hypersil GOLD, 3µm	VDSpher® PUR 150 C18-E, 3µm	use only in range of pH = 2 to 7.5
Hypersil GOLD, 5µm	VDSpher® PUR 150 C18-E, 5µm	use only in range of pH = 2 to 7.5
Hypersil GOLD C8, 1.9µm	U-VDSpher® PUR 100 C8-E, 1.8µm	use only in range of pH = 2 to 7.5 higher surface area and higher carbon load → longer retention expected
Hypersil GOLD C8, 3µm	VDSpher® PUR 100 C8-E, 3µm	use only in range of pH = 2 to 7.5 higher surface area and higher carbon load → longer retention expected
Hypersil GOLD C8, 5µm	VDSpher® PUR 150 C8-E, 5µm	use only in range of pH = 2 to 7.5
Hypersil GOLD C4, 3µm	VDSpher® PUR 100 C4-E, 3µm	higher surface area → longer retention expected
Hypersil GOLD C4, 5µm	VDSpher® PUR 100 C4-E, 5µm	higher surface area → longer retention expected
Hypersil GOLD aQ, 1.9µm	U-VDSpher® PUR 100 C18-H, 1.8µm	use only in range of pH = 2 to 7.5 higher surface area → longer retention expected
Hypersil GOLD aQ, 3µm	VDSpher® OptiAqua PUR 100 C18, 3µm	use only in range of pH = 2 to 8 higher surface area → longer retention expected
Hypersil GOLD aQ, 5µm	VDSpher® OptiAqua PUR 100 C18, 5µm	use only in range of pH = 2 to 8 higher surface area → longer retention expected
Hypersil GOLD Phenyl, 1.9µm	U-VDSpher® PUR 100 Phenyl-E, 1.8µm	higher surface area and higher carbon load → longer retention expected
Hypersil GOLD Phenyl, 3µm	VDSpher® PUR 100 Phenyl-E, 3µm	higher surface area and higher carbon load → longer retention expected
Hypersil GOLD Phenyl, 5µm	VDSpher® PUR 100 Phenyl-E, 5µm	higher surface area and higher carbon load → longer retention expected
Hypersil GOLD CN, 1.9µm	U-VDSpher® PUR 100 CN, 1.8µm	higher surface area and higher carbon load → longer retention expected
Hypersil GOLD CN, 5µm	VDSpher® PUR 100 CN, 5µm	higher surface area and higher carbon load → longer retention expected
Hypersil GOLD Amino, 1.9µm	U-VDSpher® PUR 100 NH <sub>2</sub> , 1.8µm	not endcapped higher surface area and higher carbon load → longer retention expected

## 1. Alternatives to Hypersil GOLD (continued)

Thermo	VDSpher®	
Hypersil GOLD	replacement recommendation	comments
Hypersil GOLD Amino, 3µm	VDSpher® PUR 100 NH <sub>2</sub> , 3µm	not endcapped higher surface area and higher carbon load → longer retention expected
Hypersil GOLD Amino, 5µm	VDSpher® PUR 100 NH <sub>2</sub> , 5µm	not endcapped higher surface area and higher carbon load → longer retention expected
Hypersil GOLD AX, 5µm	VDSpher® PUR 100 PEI, 5µm	use only in range of pH = 4 to 7 higher surface area → longer retention expected
Hypersil GOLD Silica, 1.9µm	U-VDSpher® PUR 100 SIL, 1.8µm	higher surface area → longer retention expected
Hypersil GOLD Silica, 3µm	VDSpher® PUR 100 SIL, 3µm	higher surface area → longer retention expected
Hypersil GOLD Silica, 5µm	VDSpher® PUR 100 SIL, 5µm	higher surface area → longer retention expected
Hypersil GOLD PEI HILIC, 5µm	VDSpher® PUR 100 PEI, 5µm	use only in range of pH = 4 to 7 equilibration with RP solvents required higher surface area → longer retention expected

## 2. Alternatives to Hypersil

Thermo	VDSpher®	
Hypersil	replacement recommendation	comments
Hypersil ODS, 3µm	VDSpher PUR 150 C18-E, 3µm	
Hypersil ODS, 5µm	VDSpher 150 C18-E, 5µm	
Hypersil ODS-2, 3µm	VDSpher PUR 100 C18-E, 3µm	higher surface area and higher carbon load → longer retention expected
Hypersil ODS-2, 5µm	VDSpher 100 C18-E, 5µm	higher surface area and higher carbon load → longer retention expected
Hypersil MOS, 5µm	VDSpher 150 C8-E, 5µm	endcapped
Hypersil MOS-2, 5µm	VDSpher 150 C8-E, 5µm	

## 2. Alternatives to Hypersil (continued)

Thermo	VDSpher®	
Hypersil	replacement recommendation	comments
Hypersil Phenyl, 5µm	VDSpher 100 Phenyl-E, 5µm	endcapped higher surface area and higher carbon load → longer retention expected
Hypersil Phenyl-2, 5µm	VDSpher 100 Phenyl-E, 5µm	higher surface area and higher carbon load → longer retention expected
Hypersil CPS, 5µm	VDSpher 100 CN, 5µm	endcapped higher surface area and higher carbon load → longer retention expected
Hypersil CPS-2, 5µm	VDSpher 100 CN, 5µm	higher surface area and higher carbon load → longer retention expected
Hypersil APS-2, 3µm	VDSpher PUR 100 NH <sub>2</sub> , 3µm	higher surface area and higher carbon load → longer retention expected
Hypersil APS-2, 5µm	VDSpher 100 NH <sub>2</sub> , 5µm	higher surface area and higher carbon load → longer retention expected
Hypersil Silica, 3µm	VDSpher PUR 100 SIL, 3µm	higher surface → longer retention expected
Hypersil Silica, 5µm	VDSpher 150 SIL, 5µm	

## 3. Alternatives to Hypersil BDS

Thermo	VDSpher®	
Hypersil BDS	replacement recommendation	comments
Hypersil BDS C18, 2.4µm	VDSpher MS 100 C18-DE, 2.5µm	higher surface area and higher carbon load → longer retention expected
Hypersil BDS C18, 3µm	VDSpher PUR 100 C18-SE, 3µm	higher surface area and higher carbon load → longer retention expected
Hypersil BDS C18, 5µm	VDSpher PUR 100 C18-SE, 5µm	higher surface area and higher carbon load → longer retention expected
Hypersil BDS C8, 2.4µm	VDSpher MS 100 C8-B-DE, 2.5µm	higher surface area and higher carbon load → longer retention expected
Hypersil BDS C8, 3µm	VDSpher PUR 100 C8-SE, 3µm	higher surface area and higher carbon load → longer retention expected
Hypersil BDS C8, 5µm	VDSpher PUR 100 C8-SE, 5µm	higher surface area and higher carbon load → longer retention expected

### 3. Alternatives to Hypersil BDS (continued)

Thermo	VDSpher®	
Hypersil BDS	replacement recommendation	comments
Hypersil BDS Phenyl, 3µm	VDSpher PUR 100 Phenyl-SE, 3µm	higher surface area and higher carbon load → longer retention expected
Hypersil BDS Phenyl, 5µm	VDSpher PUR 100 Phenyl-SE, 5µm	higher surface area and higher carbon load → longer retention expected
Hypersil BDS CN, 5µm	VDSpher PUR 150 CN-SE, 5µm	

### 4. Alternatives to Acclaim

Thermo	VDSpher®	
Acclaim	replacement recommendation	comments
Acclaim 120 C18, 3µm	VDSpher® PUR 100 C18-SE, 3µm	
Acclaim 120 C18, 5µm	VDSpher® PUR 100 C18-SE, 5µm	
Acclaim 120 C8, 3µm	VDSpher® PUR 100 C8-SE, 3µm	
Acclaim 120 C8, 5µm	VDSpher® PUR 100 C8-SE, 5µm	
Acclaim 120 Phenyl-1, 3µm	VDSpher® PUR 100 Phenyl-SE, 3µm	
Acclaim 120 Phenyl-1, 5µm	VDSpher® PUR 100 Phenyl-SE, 5µm	

## 5. Alternatives to Synchronis

Thermo	VDSpher®	
Synchronis	replacement recommendation	comments
Synchronis C18, 1.7µm	U-VDSpher PUR 100 C18-M-SE, 1.8µm	higher carbon load → longer retention expected
Synchronis C18, 3µm	VDSpher PUR 100 C18-SE, 3µm	
Synchronis C18, 5µm	VDSpher PUR 100 C18-SE, 5µm	
Synchronis C8, 3µm	VDSpher PUR 100 C8-SE, 3µm	
Synchronis C8, 5µm	VDSpher PUR 100 C8-SE, 5µm	
Synchronis aQ, 1.7µm	U-VDSpher PUR 100 C18-H, 1.8µm	lower carbon load → shorter retention expected
Synchronis aQ, 3µm	VDSpher OptiAqua PUR 100 C18, 3µm	lower carbon load → shorter retention expected
Synchronis aQ, 5µm	VDSpher OptiAqua PUR 100 C18, 5µm	lower carbon load → shorter retention expected
Synchronis Phenyl, 3µm	VDSpher PUR 100 Phenyl-SE, 3µm	
Synchronis Phenyl, 5µm	VDSpher PUR 100 Phenyl-SE, 5µm	
Synchronis Silica, 1.7µm	U-VDSpher PUR 100 SIL, 1.8µm	
Synchronis Silica, 3µm	VDSpher PUR 100 SIL, 3µm	
Synchronis Silica, 5µm	VDSpher PUR 100 SIL, 5µm	
Synchronis HILIC, 5µm	VDSpher PUR 100 HILIC-Z, 5µm	

VDS optilab Chromatographietechnik GmbH does not warrant that every application can be transferred or applied without changes of chromatographic conditions.

VDSpher<sup>®</sup>, VDSpher<sup>®</sup> PUR, U-VDSpher<sup>®</sup> PUR, VDSpher<sup>®</sup> MS, VDSpher<sup>®</sup> OptiAqua, VDSpher<sup>®</sup> OptiBio and VDSpher<sup>®</sup> Flash are registered trademarks of VDS optilab Chromatographietechnik GmbH.

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