



# 为液相色谱柱设立行业标准

沃特世公司先进的HPLC和UPLC色谱柱技术使实验室色谱能力最大化。我们是硅胶颗粒和杂化颗粒 (BEH技术和CSH技术) 的一流制造商, 能够就一个产品的整个生命周期中持续监测和控制其全部的生产工艺过程。

**USP分类号 pH范围(室温下) 温度限制 粒径 孔径 比表面积 含碳量**

(Charged Surface Hybrid, 表面带电杂化颗粒技术)

型号	USP Class	pH Range	Temp. Limit	Particle Size	Pore Size	Surface Area	Carbon Content
CSH C <sub>18</sub>	L1	1-11	Low pH = 80°C High pH = 45°C	1.7µm	130Å	185m <sup>2</sup> /g	15%
CSH 苯己基 (Phenyl-Hexyl)	L11	1-11	Low pH = 80°C High pH = 45°C	1.7µm	130Å	18 m <sup>2</sup> /g	14%
CSH 氟苯基 (Fluoro-Phenyl)	L43	1-8	Low pH = 60°C High pH = 45°C	1.7µm	130Å	185m <sup>2</sup> /g	10%

**USP分类号 pH范围(室温下) 温度限制 粒径 孔径 比表面积 含碳量**

XSelect HPLC色谱柱

型号	USP Class	pH Range	Temp. Limit	Particle Size	Pore Size	Surface Area	Carbon Content
CSH C <sub>18</sub>	L1	1-11	Low pH = 80°C High pH = 45°C	3.5, 5µm	130Å	185m <sup>2</sup> /g	15%
CSH 苯己基 (Phenyl-Hexyl)	L11	1-11	Low pH = 80°C High pH = 45°C	3.5, 5µm	130Å	185m <sup>2</sup> /g	14%
CSH 氟苯基 (Fluoro-Phenyl)	L43	1-8	Low pH = 60°C High pH = 45°C	3.5, 5µm	130Å	185m <sup>2</sup> /g	10%

(Bridged Ethylene Hybrid, 亚乙基桥杂化颗粒技术)

型号	USP Class	pH Range	Temp. Limit	Particle Size	Pore Size	Surface Area	Carbon Content
BEH C <sub>18</sub>	L1	1-12	Low pH = 80°C High pH = 60°C	1.7µm	130Å	185m <sup>2</sup> /g	18%
BEH C <sub>8</sub>	L7	1-12	Low pH = 60°C High pH = 60°C	1.7µm	130Å	185m <sup>2</sup> /g	13%
BEH Shield RP18 (内嵌极性官能团)	L1	2-11	Low pH = 50°C High pH = 45°C	1.7µm	130Å	185m <sup>2</sup> /g	17%
BEH Phenyl苯基	L11	1-12	Low pH = 80°C High pH = 60°C	1.7µm	130Å	185m <sup>2</sup> /g	15%
BEH HILIC	L3	1-9	Low pH = 45°C High pH = 45°C	1.7µm	130Å	185 m <sup>2</sup> /g	未键合
BEH Amide (酰胺基)	-	2-11	Low pH = 90°C High pH = 90°C	1.7µm	130Å	185 m <sup>2</sup> /g	12%
BEH 130 C <sub>18</sub> (肽分离技术)	L1	1-12	Low pH = 80°C High pH = 60°C	1.7µm	130Å	185 m <sup>2</sup> /g	18%
BEH 300 C <sub>18</sub> (肽分离技术)	L1	1-12	Low pH = 80°C High pH = 60°C	1.7µm	300Å	90 m <sup>2</sup> /g	12%
BEH 300 C <sub>4</sub> (蛋白质分离技术)	L26	1-10	Low pH = 80°C High pH = 50°C	1.7µm	300Å	90 m <sup>2</sup> /g	8%
BEH C <sub>18</sub> (寡核苷酸分离技术)	L1	1-12	Low pH = 80°C High pH = 60°C	1.7µm	130Å	185 m <sup>2</sup> /g	18%
BEH Glycan (糖基侧链分离技术)	-	2-11	Low pH = 90°C High pH = 90°C	1.7µm	130Å	185 m <sup>2</sup> /g	12%
BEH200 SEC (分子筛)	L33	1-8	Low pH = 60°C High pH = 60°C	1.7µm	200Å	216 m <sup>2</sup> /g	12%

XBridge HPLC色谱柱

型号	USP Class	pH Range	Temp. Limit	Particle Size	Pore Size	Surface Area	Carbon Content
C <sub>18</sub>	L1	1-12	Low pH = 80°C High pH = 60°C	2.5, 3.5, 5, 10µm	130Å	185m <sup>2</sup> /g	18%
C <sub>8</sub>	L7	1-12	Low pH = 60°C High pH = 60°C	2.5, 3.5, 5, 10µm	130Å	185m <sup>2</sup> /g	13%
Shield RP18 (内嵌极性官能团)	L1	2-11	Low pH = 50°C High pH = 45°C	2.5, 3.5, 5, 10µm	130Å	185m <sup>2</sup> /g	17%
Phenyl (苯基)	L11	1-12	Low pH = 80°C High pH = 60°C	2.5, 3.5, 5µm	130Å	185m <sup>2</sup> /g	15%
HILIC	L3	1-9	Low pH = 45°C High pH = 45°C	2.5, 3.5, 5µm	130Å	185m <sup>2</sup> /g	unbonded
Amide	-	2-11	Low pH = 90°C High pH = 90°C	3.5µm	130Å	185m <sup>2</sup> /g	12%
BEH130 C <sub>18</sub> (肽分离技术)	L1	1-12	Low pH = 80°C High pH = 60°C	3.5, 5, 10µm	130Å	185m <sup>2</sup> /g	18%
BEH300 C <sub>18</sub> (肽分离技术)	L1	1-12	Low pH = 80°C High pH = 60°C	3.5, 5, 10µm	300Å	90m <sup>2</sup> /g	12%
BEH300 C <sub>4</sub> (蛋白质分离技术)	L26	1-10	Low pH = 80°C High pH = 50°C	3.5µm	300Å	90m <sup>2</sup> /g	8%
BEH C <sub>18</sub> (寡核苷酸分离技术)	L1	1-12	Low pH = 80°C High pH = 60°C	2.5µm	130Å	185m <sup>2</sup> /g	18%

(High Strength Silica, 高强度硅胶)

型号	USP Class	pH Range	Temp. Limit	Particle Size	Pore Size	Surface Area	Carbon Content
HSS C <sub>18</sub>	L1	1-8	Low pH = 45°C High pH = 45°C	1.8µm	100Å	230 m <sup>2</sup> /g	15%
HSS C <sub>18</sub> SB	L1	2-8	Low pH = 45°C High pH = 45°C	1.8µm	100Å	230 m <sup>2</sup> /g	8%
HSS T3	L1	2-8	Low pH = 45°C High pH = 45°C	1.8µm	100Å	230 m <sup>2</sup> /g	11%

HSS HPLC色谱柱

型号	USP Class	pH Range	Temp. Limit	Particle Size	Pore Size	Surface Area	Carbon Content
HSS C <sub>18</sub>	L1	1-8	Low pH = 45°C High pH = 45°C	3.5, 5µm	100Å	230m <sup>2</sup> /g	15%
HSS C <sub>18</sub> SB	L1	2-8	Low pH = 45°C High pH = 45°C	3.5, 5µm	100Å	230m <sup>2</sup> /g	8%
HSS T3	L1	2-8	Low pH = 45°C High pH = 45°C	3.5, 5µm	100Å	230m <sup>2</sup> /g	11%

Atlantis HPLC色谱柱\*

型号	USP Class	pH Range	Temp. Limit	Particle Size	Pore Size	Surface Area	Carbon Content
T3	L1	2-8	Low pH = 45°C High pH = 45°C	3.5, 10µm	100Å	330m <sup>2</sup> /g	14%
HILIC	L3	1-5	Low pH = 45°C High pH = 45°C	3.5µm	100Å	330m <sup>2</sup> /g	无键合
dC18	L1	3-7	Low pH = 45°C High pH = 45°C	3.5, 10µm	100Å	330m <sup>2</sup> /g	12%

SunFire HPLC色谱柱\*

型号	USP Class	pH Range	Temp. Limit	Particle Size	Pore Size	Surface Area	Carbon Content
C <sub>18</sub>	L1	2-8	Low pH = 50°C High pH = 40°C	2.5, 3.5, 5, 10µm	100Å	340m <sup>2</sup> /g	16%
C <sub>8</sub>	L7	2-8	Low pH = 40°C High pH = 40°C	2.5, 3.5, 5, 10µm	100Å	340m <sup>2</sup> /g	12%

\*SunFire与Atlantis HPLC柱不提供亚二胺颗粒规格  
所有系列均有制备柱产品可供无砷放大。详见“制备色谱产品”章节。

经销商: 北京金欧亚科技发展有限公司  
电话: 010-67113925 67113913 传真: 010-67136152  
网址: www.jinouya.cn 邮箱: china.hplc@163.com

## 色谱填料的一流制造商

- 沃特世公司被授予以下注册及认证资格:
  - 美国食品与药物管理局注册: cGMP和Class I医疗器械
  - ISO 9001:2008
  - ISO 13485: 2003
- 沃特世公司拥有并控制制造工艺流程中的每个步骤, 从初始的原材料到最终的成品 (有此能力的色谱制造商相当少)。理解并控制工艺步骤能够确保我们的产品能在您的实验室中表现与众不同。



# Waters

THE SCIENCE OF WHAT'S POSSIBLE™

©2011沃特世公司, Waters, XBridge, Atlantis, SunFire, BEH Technology, XSelect, CSH, Acquity, Acquity UPLC, UPLC, and The Science of What's Possible是沃特世公司的商标。 June 2011 720002241ZH VMPDF