

# PerfectBond®

## State-of-the-Art- + Best Value-Replacement for Classical Applications

Our recently introduced product-line **PerfectBond™** is based on a series of selected state-of-the-art silica (99.999 % purity), to provide modern replacements for traditional stationary phases. The **PerfectBond™**-product-range is continuously extended, enabling us to offer our customers reliable and cost-effective replacements for various well-known classical stationary phases.

Classical stationary phases like  $\mu$ Bondapak™ are still frequently used for many applications. Mainly because of their unique selectivity and retentivity - and despite some disadvantages like the high back-pres-

sure resulting from their irregularly shaped particle morphology. For  $\mu$ Bondapak™ we offer **PerfectBond™ C18** as excellent replacement: based on spherical and totally porous base silica, all chromatographic performance values are widely enhanced.

**PerfectBond™** is based on an ultra pure, state-of-the-art-silica, which is absolutely spherical and chemically modified under ISO-9001-certified conditions. We carefully select base silica, chemistry and carbon load to get an optimum match of the classical material. This enables us to deliver replacements for traditional stationary phases with

the same retentivity and selectivity as the original - in most cases with lower back-pressure and enhanced efficiency plus longer column lifetime due to higher mechanical and chemical resistibility.

Replace your classic column with a **PerfectBond™-HPLC-Column** and even cost-efficiency will benefit from longer column-lifetime and guaranteed refill-service.

Our range of **PerfectBond™-HPLC-columns** is continuously growing. Please ask us, when we can provide a state-of-the-art replacement for your "classical" HPLC-column.

PerfectBond™-Series								Technical Data			
	particle size	code	price group	pore size	surface area	chemistry	carbon contents	endcapping	particle shape	silica purity	
PerfectBond ODS-H	5 $\mu$ m	1195	E	120 Å	170 m <sup>2</sup> /g	C18	10.0 %	+	spherical	99.999 %	
PerfectBond ODS-HD	3 $\mu$ m	1200	F	150 Å	320 m <sup>2</sup> /g	C18	18.5 %	+	spherical	99.999 %	
PerfectBond ODS-HD	5 $\mu$ m	1198	E	150 Å	320 m <sup>2</sup> /g	C18	18.5 %	+	spherical	99.999 %	
PerfectBond C18 ODS	5 $\mu$ m	1190	E	125 Å	300 m <sup>2</sup> /g	C18	10.0 %	+	spherical	99.999 %	
PerfectBond C18*	10 $\mu$ m	1011	E	125 Å	300 m <sup>2</sup> /g	C18	10.0 %	+	spherical	99.999 %	
* Replacement for $\mu$ Bondapak™ C18 10 $\mu$ m											
PerfectBond C8-HD	3 $\mu$ m	1202	F	150 Å	320 m <sup>2</sup> /g	C8	10.5 %	+	spherical	99.999 %	
PerfectBond C8-HD	5 $\mu$ m	1204	E	150 Å	320 m <sup>2</sup> /g	C8	10.5 %	+	spherical	99.999 %	
PerfectBond C8-H	5 $\mu$ m	1192	E	120 Å	170 m <sup>2</sup> /g	C8	6.5 %	+	spherical	99.999 %	
PerfectBond C8	5 $\mu$ m	1018	E	125 Å	300 m <sup>2</sup> /g	C8	7.0 %	+	spherical	99.999 %	
PerfectBond C1	3 $\mu$ m	1180	F	120 Å	170 m <sup>2</sup> /g	C1	5.0 %	-	spherical	99.999 %	
PerfectBond C1	5 $\mu$ m	1182	E	120 Å	170 m <sup>2</sup> /g	C1	5.0 %	-	spherical	99.999 %	
PerfectBond Ph	5 $\mu$ m	1220	E	120 Å	200 m <sup>2</sup> /g	Phenyl	6.0 %	+	spherical	99.999 %	
PerfectBond Ph-H	5 $\mu$ m	1222	E	120 Å	170 m <sup>2</sup> /g	Phenyl	5.0 %	+	spherical	99.999 %	

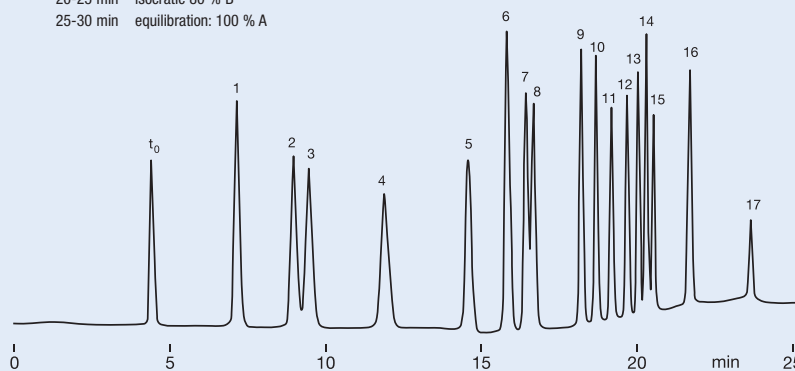
refer to page 3 for part-no. and price

### Chlorophenoles

column: PerfectBond ODS-HD 5  $\mu$ m  
250 x 4.0 mm  
flow rate: 1 ml/min  
temperature: 30 °C  
detection: UV @ 280 nm  
eluent: A: 50 % methanol/H<sub>2</sub>O + 0.1 % H<sub>3</sub>PO<sub>4</sub>  
B: 100 % methanol  
gradient: 0-10 min isocratic 100 % A  
10-20 min linear to 80 % B  
20-25 min isocratic 80 % B  
25-30 min equilibration: 100 % A

**Analytes:**

1 2-chlorophenole	9 3,5-dichlorophenole
2 4-chlorophenole	10 2,3,6-trichlorophenole
3 3-chlorophenole	11 2,3,4-trichlorophenole
4 2,6-dichlorophenole	12 2,4,6-trichlorophenole
5 2,3-dichlorophenole	13 2,4,5-trichlorophenole
6 2,5-dichlorophenole	14 2,3,5-trichlorophenole
7 2,4-dichlorophenole	15 2,3,5,6-tetrachlorophenole
8 3,4-dichlorophenole	16 2,3,4,5-tetrachlorophenole
	17 pentachlorophenole



- ➡ Spherical, porous and ultra pure state-of-the-art silica
- ➡ Silica purity > 99,999 %
- ➡ Low polydispersity => high efficiency + small back-pressure
- ➡ High chemical and mechanical resistibility => long column lifetime
- ➡ Manufacturing process ISO-9001-certified
- ➡ High reproducibility from batch-to-batch & column-to-column
- ➡ Excellent cost-/performance ratio + guaranteed refill-service
- ➡ Please ask us for the optimum **PerfectBond™**-replacement for your classical stationary phase media:  
**phone +49-6131-68 66 19**