

Technical data sheet

PrepPure Columns

PrepPure columns are filled with high-quality silica and enable the performance of high-resolution separations. Easy scalability and phases for standard and targeted applications make PrepPure the obvious choice for the best prep HPLC and SFC results.



Phase description



NOTE

All phases are silica based. The modifications are described below.

Phase	Modification
Silica modified	
Silica	Most polar phase, typically used for Normal Phase LC and achiral SFC applications
Diol	Polar phase, typically used for Normal Phase LC and achiral SFC applications
2-Ethylpyridin (2-EP)	Polar phase, typically used for achiral SFC applications
Polyethyleneimine (PEI)	Polar phase, typically used for achiral SFC applications
C18	Most unpolar phase, typically used for Reversed Phase LC applications and achiral SFC applications
C18WP	Unpolar phase with large pore diameter, typically used for Reversed Phase LC peptides / protein applications
C18AQ	Unpolar phase modified by small polar silane which makes the phase water resistant
C4WP	Unpolar phase with large pore diameter, typically used for Reversed Phase LC peptides / protein applications
CBD	Typically used for CBD SFC applications
Immobilized polysaccharides	
iADMPC Amylose tris-(3.5-dimethylphenylcarbamate)	Typically used for chiral SFC applications
iCDMPC Cellulose tris-(3.5-dimethylphenylcarbamate)	Typically used for chiral SFC applications
iCDCPC Cellulose tris-(3.5-dichlorophenylcarbamate)	Typically used for chiral SFC applications
Coated polysaccharides	
cCDMPC Cellulose tris-(3.5-dimethylphenylcarbamate)	Typically used for chiral SFC applications
cADMPC Amylose tris-(3.5-dimethylphenylcarbamate)	Typically used for chiral SFC applications
Brush type	
iBT (immobilized brush-type phase)	Typically used for chiral SFC applications

Phase specifications

	Particle shape	Pore size Å	End capping	Carbon content %	Surface g/m ²
Silica	spherical	60	N/A	N/A	500
C18	spherical	100	Yes	16.5	300
C18 AQ	spherical	100	Yes	11	250
C18 WP	spherical	300	Yes	8	100
C4 WP	spherical	300	Yes	4	100
cCDMPC	spherical	1000	No	N/A	30
cADMPC	spherical	1000	No	N/A	30
iADMPC	spherical	1000	No	N/A	30
iCDMPC	spherical	1000	No	N/A	30
iCDCPC	spherical	1000	No	N/A	30
iBT	spherical	100	No	N/A	350
CBD	spherical	100	N/A	N/A	350
Diol	spherical	100	Yes	7	350
2-EP	spherical	100	N/A	N/A	350
PEI	spherical	100	N/A	N/A	350

Column specifications

Phases: Silica, C18, C18 AQ, C18 WP, C4 WP

ID mm	Lengths mm	Column volume mL	Default flow rate mL/min	Max. pressure bar
4.6	150	2.50	0.5 – 2.5	400
	250	4.10	0.5 – 2.5	400
10	150	12.00	2.5 – 10	400
	250	20.00	2.5 – 10	400
20	150	47.00	10 – 40	300
	250	79.00	10 – 40	300
30	150	106.00	20 – 80	210
	250	177.00	20 – 80	210
50	150	300.00	60 – 200	140
	250	490.00	60 – 200	140
70	150	478.00	100 – 400	130
	250	962.00	100 – 400	130

Phases: cCDMPC, cADMPC, iADMPC, iCDMPC, iCDCPC, iBT, CBD, Diol, 2-EP, PEI

ID mm	Lengths mm	Column volume mL	Default flow rate mL/min	Max. pressure bar
4.6	250	4.10	0.5 – 2.5	400
10	250	20.00	2.5 – 10	400
20	250	79.00	10 – 40	300
30	250	177.00	20 – 80	210
50	250	490.00	60 – 200	140

Loading capacities



NOTE

Loading capacities strongly depend on the application. For chiral separations the loading capacities are not predictable at all but typically lower than for non chiral compounds.

ID mm	Length mm	Loading capacity g		
		Silica	C18, C18 AQ, C18 WP, C4 WP, CBD, Diol, 2- EP, PEI	cCDMPC, cADMPC, iADMPC, iCDMPC, iCDCPC, iBT
		max.	max.	max.
4.6	150	0.125	0.0125	-
	250	0.205	0.0205	-
10	150	0.600	0.0600	-
	250	1.000	0.1000	-
20	150	2.350	0.2350	-
	250	3.950	0.3950	-
30	150	5.300	0.5300	-
	250	8.850	0.8850	-
50	150	15.000	1.5000	-
	250	24.500	2.4500	-
70	150	23.900	2.3900	-
	250	48.100	4.8100	-

PrepPure part numbers

All PrepPure columns are delivered as single pieces and with a 1/16" connection.

Dimensions

(L × ID) mm	Silica			C18		
	5 μm	10 μm	15 μm	5 μm	10 μm	15 μm
150 × 4.6	11068624	11068636	11068648	11068661	11068673	11068685
250 × 4.6	11068625	11068637	11068649	11068662	11068674	11068686
150 × 10	11068626	11068638	11068650	11068663	11068675	11068687
250 × 10	11068627	11068639	11068651	11068664	11068676	11068688
150 × 20	11068628	11068640	11068652	11068665	11068677	11068689
250 × 20	11068629	11068641	11068653	11068666	11068678	11068690
150 × 30	11068630	11068642	11068654	11068667	11068679	11068691
250 × 30	11068631	11068643	11068655	11068668	11068680	11068692
150 × 50	11068632	11068644	11068656	11068669	11068681	11068693
250 × 50	11068633	11068645	11068657	11068670	11068682	11068694
150 × 70	11068634	11068646	11068658	11068671	11068683	11068695
250 × 70	11068635	11068647	11068659	11068672	11068684	11068696

Dimensions

(L × ID) mm	C18 AQ			C18 WP		
	5 µm	10 µm	15 µm	5 µm	10 µm	15 µm
150 × 4.6	11068735	11068747	11068759	11075267	11075279	11075291
250 × 4.6	11068736	11068748	11068760	11075268	11075280	11075292
150 × 10	11068737	11068749	11068761	11075269	11075281	11075293
250 × 10	11068738	11068750	11068762	11075270	11075282	11075294
150 × 20	11068739	11068751	11068763	11075271	11075283	11075295
250 × 20	11068740	11068752	11068764	11075272	11075284	11075296
150 × 30	11068741	11068753	11068765	11075273	11075285	11075297
250 × 30	11068742	11068754	11068766	11075274	11075286	11075298
150 × 50	11068743	11068755	11068767	11075275	11075287	11075299
250 × 50	11068744	11068756	11068768	11075276	11075288	11075300
150 × 70	11068745	11068757	11068769	11075277	11075289	11075301
250 × 70	11068746	11068758	11068770	11075278	11075290	11075302

Dimensions

(L × ID) mm	C4 WP		
	5 µm	10 µm	15 µm
150 × 4.6	11068698	11068710	11068722
250 × 4.6	11068699	11068711	11068723
150 × 10	11068700	11068712	11068724
250 × 10	11068701	11068713	11068725
150 × 20	11068702	11068714	11068726
250 × 20	11068703	11068715	11068727
150 × 30	11068704	11068716	11068728
250 × 30	11068705	11068717	11068729
150 × 50	11068706	11068718	11068730
250 × 50	11068707	11068719	11068731
150 × 70	11068708	11068720	11068732
250 × 70	11068709	11068721	11068733

Dimensions

(L × ID) mm	cCDMPC	cADMPC	iADMPC	iCDMPC	iCDCPC
	5 µm	5 µm	5 µm	5 µm	5 µm
250 × 4.6	11075777	11075778	11075779	11075780	11075781
250 × 10	11075738	11075741	11075744	11075747	11075750
250 × 20	11075739	11075742	11075745	11075748	11075751
250 × 30	11075740	11075743	11075746	11075749	11075752
250 × 50	11080637	11080638	11080639	11080641	11080640

Dimensions

(L × ID) mm	iBT	CBD	Diol	2-EP	PEI
	8 µm	5 µm	5 µm	5 µm	5 µm
250 × 4.6	11075782	11075783	11075784	11075785	11075786
250 × 10	11075753	11075756	11075759	11075762	11075765
250 × 20	11075754	11075757	11075760	11075763	11075766
250 × 30	11075755	11075758	11075761	11075764	11075767
250 × 50	11080642	11080643	11080644	11080645	11080646

Accessories

Guard columns

All guard columns and holders are delivered as single pieces and with a 1/16" connection.

NOTICE! The C4 WP guard column can be used for the C18, C18 AQ and C18 WP PrepPure.

Dimensions

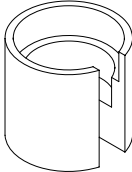
(L × ID) mm	Silica (15 µm)	C4 WP (15 µm)	Guard holders
10 × 20	11069263	11071490	11069267
10 × 30	11069264	11071491	11069268
30 × 50	11070896	11070899	none

Adapters & spare parts

	Order no.	Image
PrepPure Column Coupler, Steel 1/16" x 1.0 mm ID, 1 pc.	11069269	
PrepPure Adapter 1/8 - 1/16", 1 pc.	11070900	
PrepPure Adapter 1/8" - M12, 1 pc.	11071623	
PrepPure O-ring 1/16" & 1/8" - M12, 2 pcs.	11071624	
O-ring for guard column holder 10 × 20 mm.	11070573	
O-ring for guard column holder 10 × 30 mm.	11070574	

Column holder

PrepPure columns with an ID >30 mm require a specific holder to connect with a Pure system.

	Order no.	Image
Pure column holder XL Column holder for column diameters 50 to 70 mm	11068467	



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