

2017 PRODUCT LIST

Columns and Accessories

DAICEL



CHIRALPAK® IA-U

Amylose tris
(3,5-dimethylphenylcarbamate)
Part No. 80U83
Particle size: < 2 μ m
Internal diameter: 3.0 mm
Length: 100 mm


CHIRAL
TECHNOLOGIES INC
DAICEL GROUP

2017 Product List

PART NUMBER	PRODUCT NAME	PARTICLE SIZE (µm)	ID (mm)	LENGTH (mm)	PRODUCT TYPE
IMMOBILIZED POLYSACCHARIDE CSPs AND COLUMNS*					
CHIRALPAK® IA					
80020	CHIRALPAK IA	20	1 kg	–	Bulk CSP
80225	CHIRALPAK IA	20	4.6	250	Method Development
80233	CHIRALPAK IA	20	10	100	SMB (set of 8)
80235	CHIRALPAK IA	20	10	250	Semi-Prep
80242	CHIRALPAK IA	20	21	50	Semi-Prep Guard
80245	CHIRALPAK IA	20	21	250	Semi-Prep
80255	CHIRALPAK IA	20	50	250	Semi-Prep
80256	CHIRALPAK IA	20	50	500	Preparative
80266	CHIRALPAK IA	20	100	500	Preparative
80275	CHIRALPAK IA	20	30	250	Semi-Prep
80935	CHIRALPAK IA	20	10	250	SFC Semi-Prep
80945	CHIRALPAK IA	20	21	250	SFC Semi-Prep
80955	CHIRALPAK IA	20	50	250	SFC Semi-Prep
80975	CHIRALPAK IA	20	30	250	SFC Semi-Prep
80010	CHIRALPAK IA	10	1 kg	–	Bulk CSP
80011	CHIRALPAK IA	10	4.0	10	Guard Cartridges**
80024	CHIRALPAK IA	10	4.6	150	Analytical
80025	CHIRALPAK IA	10	4.6	250	Analytical
80094	CHIRALPAK IA	10	2.1	150	Analytical
80122	CHIRALPAK IA	10	4.6	50	SFC Guard
80135	CHIRALPAK IA	10	10	250	SFC Semi-Prep
80145	CHIRALPAK IA	10	21	250	SFC Semi-Prep
80155	CHIRALPAK IA	10	50	250	SFC Preparative
80175	CHIRALPAK IA	10	30	250	SFC Semi-Prep
80311	CHIRALPAK IA	5	4.0	10	Guard Cartridges
80324	CHIRALPAK IA	5	4.6	150	Analytical
80325	CHIRALPAK IA	5	4.6	250	Analytical
80335	CHIRALPAK IA	5	10	250	Semi-Prep
80337	CHIRALPAK IA	5	10	20	Semi-Prep Guard
80345	CHIRALPAK IA	5	20	250	Semi-Prep
80375	CHIRALPAK IA	5	30	250	Semi-Prep
80394	CHIRALPAK IA	5	2.1	150	Analytical
80422	CHIRALPAK IA	5	4.6	50	SFC Guard
80423	CHIRALPAK IA	5	4.6	100	SFC Screening Column
80435	CHIRALPAK IA	5	10	250	SFC Semi-Prep
80445	CHIRALPAK IA	5	21	250	SFC Semi-Prep
80455	CHIRALPAK IA	5	50	250	SFC Preparative
80475	CHIRALPAK IA	5	30	250	SFC Semi-Prep
CHIRALPAK® IA-3					
80511	CHIRALPAK IA-3	3	4.0	10	Guard Cartridges
80522	CHIRALPAK IA-3	3	4.6	50	Analytical
80523	CHIRALPAK IA-3	3	4.6	100	Analytical
80524	CHIRALPAK IA-3	3	4.6	150	Analytical
80525	CHIRALPAK IA-3	3	4.6	250	Analytical
80592	CHIRALPAK IA-3	3	2.1	50	Analytical
80593	CHIRALPAK IA-3	3	2.1	100	Analytical

PART NUMBER	PRODUCT NAME	PARTICLE SIZE (µm)	ID (mm)	LENGTH (mm)	PRODUCT TYPE
80594	CHIRALPAK IA-3	3	2.1	150	Analytical
80595	CHIRALPAK IA-3	3	2.1	250	Analytical
80S82	CHIRALPAK IA-3	3	3.0	50	Analytical
80S83	CHIRALPAK IA-3	3	3.0	100	Analytical
80S84	CHIRALPAK IA-3	3	3.0	150	Analytical
CHIRALPAK® IA-U					
80U82	CHIRALPAK IA-U	<2	3.0	50	Analytical
80U83	CHIRALPAK IA-U	<2	3.0	100	Analytical
CHIRALPAK® IB					
81011	CHIRALPAK IB	10	4.0	10	Guard Cartridges
81024	CHIRALPAK IB	10	4.6	150	Analytical
81025	CHIRALPAK IB	10	4.6	250	Analytical
81094	CHIRALPAK IB	10	2.1	150	Analytical
81122	CHIRALPAK IB	10	4.6	50	SFC Guard
81135	CHIRALPAK IB	10	10	250	SFC Semi-Prep
81145	CHIRALPAK IB	10	21	250	SFC Semi-Prep
81155	CHIRALPAK IB	10	50	250	SFC Preparative
81175	CHIRALPAK IB	10	30	250	SFC Semi-Prep
81311	CHIRALPAK IB	5	4.0	10	Guard Cartridges
81324	CHIRALPAK IB	5	4.6	150	Analytical
81325	CHIRALPAK IB	5	4.6	250	Analytical
81335	CHIRALPAK IB	5	10	250	Semi-Prep
81337	CHIRALPAK IB	5	10	20	Semi-Prep Guard
81345	CHIRALPAK IB	5	20	250	Semi-Prep
81375	CHIRALPAK IB	5	30	250	Semi-Prep
81394	CHIRALPAK IB	5	2.1	150	Analytical
81422	CHIRALPAK IB	5	4.6	50	SFC Guard
81423	CHIRALPAK IB	5	4.6	100	SFC Screening Column
81435	CHIRALPAK IB	5	10	250	SFC Semi-Prep
81445	CHIRALPAK IB	5	21	250	SFC Semi-Prep
81455	CHIRALPAK IB	5	50	250	SFC Preparative
81475	CHIRALPAK IB	5	30	250	SFC Semi-Prep
CHIRALPAK® IB-3					
81511	CHIRALPAK IB-3	3	4.0	10	Guard Cartridges
81522	CHIRALPAK IB-3	3	4.6	50	Analytical
81523	CHIRALPAK IB-3	3	4.6	100	Analytical
81524	CHIRALPAK IB-3	3	4.6	150	Analytical
81525	CHIRALPAK IB-3	3	4.6	250	Analytical
81592	CHIRALPAK IB-3	3	2.1	50	Analytical
81593	CHIRALPAK IB-3	3	2.1	100	Analytical
81594	CHIRALPAK IB-3	3	2.1	150	Analytical
81595	CHIRALPAK IB-3	3	2.1	250	Analytical
81S82	CHIRALPAK IB-3	3	3.0	50	Analytical
81S83	CHIRALPAK IB-3	3	3.0	100	Analytical
81S84	CHIRALPAK IB-3	3	3.0	150	Analytical

* Immobilized polysaccharide columns are compatible for use in either normal or reverse phase chromatographic conditions.

** All guard cartridges for immobilized polysaccharide columns require a cartridge holder - part number 00011 (page 13)

PART NUMBER	PRODUCT NAME	PARTICLE SIZE (µm)	ID (mm)	LENGTH (mm)	PRODUCT TYPE
CHIRALCEL® OD-I					
82020	CHIRALCEL OD-I	20	1 kg	–	Bulk CSP
82225	CHIRALCEL OD-I	20	4.6	250	Method Development
82233	CHIRALCEL OD-I	20	10	100	SMB (set of 8)
82235	CHIRALCEL OD-I	20	10	250	Semi-Prep
82242	CHIRALCEL OD-I	20	21	50	Semi-Prep Guard
82245	CHIRALCEL OD-I	20	21	250	Semi-Prep
82255	CHIRALCEL OD-I	20	50	250	Semi-Prep
82256	CHIRALCEL OD-I	20	50	500	Preparative
82266	CHIRALCEL OD-I	20	100	500	Preparative
82275	CHIRALCEL OD-I	20	30	250	Semi-Prep
82935	CHIRALCEL OD-I	20	10	250	SFC Semi-Prep
82945	CHIRALCEL OD-I	20	21	250	SFC Semi-Prep
82955	CHIRALCEL OD-I	20	50	250	SFC Semi-Prep
82975	CHIRALCEL OD-I	20	30	250	SFC Semi-Prep

CHIRALPAK® IC

83020	CHIRALPAK IC	20	1 kg	–	Bulk CSP
83225	CHIRALPAK IC	20	4.6	250	Method Development
83233	CHIRALPAK IC	20	10	100	SMB (set of 8)
83235	CHIRALPAK IC	20	10	250	Semi-Prep
83242	CHIRALPAK IC	20	21	50	Semi-Prep Guard
83245	CHIRALPAK IC	20	21	250	Semi-Prep
83255	CHIRALPAK IC	20	50	250	Semi-Prep
83256	CHIRALPAK IC	20	50	500	Preparative
83266	CHIRALPAK IC	20	100	500	Preparative
83275	CHIRALPAK IC	20	30	250	Semi-Prep
83935	CHIRALPAK IC	20	10	250	SFC Semi-Prep
83945	CHIRALPAK IC	20	21	250	SFC Semi-Prep
83955	CHIRALPAK IC	20	50	250	SFC Semi-Prep
83975	CHIRALPAK IC	20	30	250	SFC Semi-Prep
83010	CHIRALPAK IC	10	1 kg	–	Bulk CSP
83011	CHIRALPAK IC	10	4.0	10	Guard Cartridges
83024	CHIRALPAK IC	10	4.6	150	Analytical
83025	CHIRALPAK IC	10	4.6	250	Analytical
83094	CHIRALPAK IC	10	2.1	150	Analytical
83122	CHIRALPAK IC	10	4.6	50	SFC Guard
83135	CHIRALPAK IC	10	10	250	SFC Semi-Prep
83145	CHIRALPAK IC	10	21	250	SFC Semi-Prep
83155	CHIRALPAK IC	10	50	250	SFC Preparative
83175	CHIRALPAK IC	10	30	250	SFC Semi-Prep
83311	CHIRALPAK IC	5	4.0	10	Guard Cartridges
83324	CHIRALPAK IC	5	4.6	150	Analytical
83325	CHIRALPAK IC	5	4.6	250	Analytical
83335	CHIRALPAK IC	5	10	250	Semi-Prep
83337	CHIRALPAK IC	5	10	20	Semi-Prep Guard
83345	CHIRALPAK IC	5	20	250	Semi-Prep
83375	CHIRALPAK IC	5	30	250	Semi-Prep
83394	CHIRALPAK IC	5	2.1	150	Analytical

PART NUMBER	PRODUCT NAME	PARTICLE SIZE (µm)	ID (mm)	LENGTH (mm)	PRODUCT TYPE
83422	CHIRALPAK IC	5	4.6	50	SFC Guard
83423	CHIRALPAK IC	5	4.6	100	SFC Screening Column
83435	CHIRALPAK IC	5	10	250	SFC Semi-Prep
83445	CHIRALPAK IC	5	21	250	SFC Semi-Prep
83455	CHIRALPAK IC	5	50	250	SFC Preparative
83475	CHIRALPAK IC	5	30	250	SFC Semi-Prep

CHIRALPAK® IC-3

83511	CHIRALPAK IC-3	3	4.0	10	Guard Cartridges
83522	CHIRALPAK IC-3	3	4.6	50	Analytical
83523	CHIRALPAK IC-3	3	4.6	100	Analytical
83524	CHIRALPAK IC-3	3	4.6	150	Analytical
83525	CHIRALPAK IC-3	3	4.6	250	Analytical
83592	CHIRALPAK IC-3	3	2.1	50	Analytical
83593	CHIRALPAK IC-3	3	2.1	100	Analytical
83594	CHIRALPAK IC-3	3	2.1	150	Analytical
83595	CHIRALPAK IC-3	3	2.1	250	Analytical
83S82	CHIRALPAK IC-3	3	3.0	50	Analytical
83S83	CHIRALPAK IC-3	3	3.0	100	Analytical
83S84	CHIRALPAK IC-3	3	3.0	150	Analytical

CHIRALPAK® IC-U

83U82	CHIRALPAK IC-U	<2	3.0	50	Analytical
83U83	CHIRALPAK IC-U	<2	3.0	100	Analytical

CHIRALPAK® ID

84020	CHIRALPAK ID	20	1 kg	–	Bulk CSP
84225	CHIRALPAK ID	20	4.6	250	Method Development
84233	CHIRALPAK ID	20	10	100	SMB (set of 8)
84235	CHIRALPAK ID	20	10	250	Semi-Prep
84242	CHIRALPAK ID	20	21	50	Semi-Prep Guard
84245	CHIRALPAK ID	20	21	250	Semi-Prep
84255	CHIRALPAK ID	20	50	250	Semi-Prep
84256	CHIRALPAK ID	20	50	500	Preparative
84266	CHIRALPAK ID	20	100	500	Preparative
84275	CHIRALPAK ID	20	30	250	Semi-Prep
84935	CHIRALPAK ID	20	10	250	SFC Semi-Prep
84945	CHIRALPAK ID	20	21	250	SFC Semi-Prep
84955	CHIRALPAK ID	20	50	250	SFC Semi-Prep
84975	CHIRALPAK ID	20	30	250	SFC Semi-Prep
84010	CHIRALPAK ID	10	1 kg	–	Bulk CSP
84011	CHIRALPAK ID	10	4.0	10	Guard Cartridges
84024	CHIRALPAK ID	10	4.6	150	Analytical
84025	CHIRALPAK ID	10	4.6	250	Analytical
84094	CHIRALPAK ID	10	2.1	150	Analytical
84122	CHIRALPAK ID	10	4.6	50	SFC Guard
84135	CHIRALPAK ID	10	10	250	SFC Semi-Prep
84145	CHIRALPAK ID	10	21	250	SFC Semi-Prep
84155	CHIRALPAK ID	10	50	250	SFC Preparative

2017 Product List

PART NUMBER	PRODUCT NAME	PARTICLE SIZE (µm)	ID (mm)	LENGTH (mm)	PRODUCT TYPE
84175	CHIRALPAK ID	10	30	250	SFC Semi-Prep
84311	CHIRALPAK ID	5	4.0	10	Guard Cartridges
84324	CHIRALPAK ID	5	4.6	150	Analytical
84325	CHIRALPAK ID	5	4.6	250	Analytical
84335	CHIRALPAK ID	5	10	250	Semi-Prep
84337	CHIRALPAK ID	5	10	20	Semi-Prep Guard
84345	CHIRALPAK ID	5	20	250	Semi-Prep
84375	CHIRALPAK ID	5	30	250	Semi-Prep
84394	CHIRALPAK ID	5	2.1	150	Analytical
84422	CHIRALPAK ID	5	4.6	50	SFC Guard
84423	CHIRALPAK ID	5	4.6	100	SFC Screening Column
84435	CHIRALPAK ID	5	10	250	SFC Semi-Prep
84445	CHIRALPAK ID	5	21	250	SFC Semi-Prep
84455	CHIRALPAK ID	5	50	250	SFC Preparative
84475	CHIRALPAK ID	5	30	250	SFC Semi-Prep

CHIRALPAK® ID-3

84511	CHIRALPAK ID-3	3	4.0	10	Guard Cartridges
84522	CHIRALPAK ID-3	3	4.6	50	Analytical
84523	CHIRALPAK ID-3	3	4.6	100	Analytical
84524	CHIRALPAK ID-3	3	4.6	150	Analytical
84525	CHIRALPAK ID-3	3	4.6	250	Analytical
84592	CHIRALPAK ID-3	3	2.1	50	Analytical
84593	CHIRALPAK ID-3	3	2.1	100	Analytical
84594	CHIRALPAK ID-3	3	2.1	150	Analytical
84595	CHIRALPAK ID-3	3	2.1	250	Analytical
84S82	CHIRALPAK ID-3	3	3.0	50	Analytical
84S83	CHIRALPAK ID-3	3	3.0	100	Analytical
84S84	CHIRALPAK ID-3	3	3.0	150	Analytical

CHIRALPAK® IE

85020	CHIRALPAK IE	20	1 kg	–	Bulk CSP
85225	CHIRALPAK IE	20	4.6	250	Method Development
85233	CHIRALPAK IE	20	10	100	SMB (set of 8)
85235	CHIRALPAK IE	20	10	250	Semi-Prep
85242	CHIRALPAK IE	20	21	50	Semi-Prep Guard
85245	CHIRALPAK IE	20	21	250	Semi-Prep
85255	CHIRALPAK IE	20	50	250	Semi-Prep
85256	CHIRALPAK IE	20	50	500	Preparative
85266	CHIRALPAK IE	20	100	500	Preparative
85275	CHIRALPAK IE	20	30	250	Semi-Prep
85935	CHIRALPAK IE	20	10	250	SFC Semi-Prep
85945	CHIRALPAK IE	20	21	250	SFC Semi-Prep
85955	CHIRALPAK IE	20	50	250	SFC Semi-Prep
85975	CHIRALPAK IE	20	30	250	SFC Semi-Prep
85010	CHIRALPAK IE	10	1 kg	–	Bulk CSP
85011	CHIRALPAK IE	10	4.0	10	Guard Cartridges
85024	CHIRALPAK IE	10	4.6	150	Analytical
85025	CHIRALPAK IE	10	4.6	250	Analytical
85094	CHIRALPAK IE	10	2.1	150	Analytical
85122	CHIRALPAK IE	10	4.6	50	SFC Guard

85135	CHIRALPAK IE	10	10	250	SFC Semi-Prep
85145	CHIRALPAK IE	10	21	250	SFC Semi-Prep
85155	CHIRALPAK IE	10	50	250	SFC Preparative
85175	CHIRALPAK IE	10	30	250	SFC Semi-Prep
85311	CHIRALPAK IE	5	4.0	10	Guard Cartridges
85324	CHIRALPAK IE	5	4.6	150	Analytical
85325	CHIRALPAK IE	5	4.6	250	Analytical
85335	CHIRALPAK IE	5	10	250	Semi-Prep
85337	CHIRALPAK IE	5	10	20	Semi-Prep Guard
85345	CHIRALPAK IE	5	20	250	Semi-Prep
85375	CHIRALPAK IE	5	30	250	Semi-Prep
85394	CHIRALPAK IE	5	2.1	150	Analytical
85422	CHIRALPAK IE	5	4.6	50	SFC Guard
85423	CHIRALPAK IE	5	4.6	100	SFC Screening Column
85435	CHIRALPAK IE	5	10	250	SFC Semi-Prep
85445	CHIRALPAK IE	5	21	250	SFC Semi-Prep
85455	CHIRALPAK IE	5	50	250	SFC Preparative
85475	CHIRALPAK IE	5	30	250	SFC Semi-Prep

CHIRALPAK® IE-3

85511	CHIRALPAK IE-3	3	4.0	10	Guard Cartridges
85522	CHIRALPAK IE-3	3	4.6	50	Analytical
85523	CHIRALPAK IE-3	3	4.6	100	Analytical
85524	CHIRALPAK IE-3	3	4.6	150	Analytical
85525	CHIRALPAK IE-3	3	4.6	250	Analytical
85592	CHIRALPAK IE-3	3	2.1	50	Analytical
85593	CHIRALPAK IE-3	3	2.1	100	Analytical
85594	CHIRALPAK IE-3	3	2.1	150	Analytical
85595	CHIRALPAK IE-3	3	2.1	250	Analytical
85S82	CHIRALPAK IE-3	3	3.0	50	Analytical
85S83	CHIRALPAK IE-3	3	3.0	100	Analytical
85S84	CHIRALPAK IE-3	3	3.0	150	Analytical

CHIRALPAK® IF

86020	CHIRALPAK IF	20	1 kg	–	Bulk CSP
86225	CHIRALPAK IF	20	4.6	250	Method Development
86233	CHIRALPAK IF	20	10	100	SMB (set of 8)
86235	CHIRALPAK IF	20	10	250	Semi-Prep
86242	CHIRALPAK IF	20	21	50	Semi-Prep Guard
86245	CHIRALPAK IF	20	21	250	Semi-Prep
86255	CHIRALPAK IF	20	50	250	Semi-Prep
86256	CHIRALPAK IF	20	50	500	Preparative
86266	CHIRALPAK IF	20	100	500	Preparative
86275	CHIRALPAK IF	20	30	250	Semi-Prep
86935	CHIRALPAK IF	20	10	250	SFC Semi-Prep
86945	CHIRALPAK IF	20	21	250	SFC Semi-Prep
86955	CHIRALPAK IF	20	50	250	SFC Semi-Prep
86975	CHIRALPAK IF	20	30	250	SFC Semi-Prep
86010	CHIRALPAK IF	10	1 kg	–	Bulk CSP
86011	CHIRALPAK IF	10	4.0	10	Guard Cartridges
86024	CHIRALPAK IF	10	4.6	150	Analytical

PART NUMBER	PRODUCT NAME	PARTICLE SIZE (µm)	ID (mm)	LENGTH (mm)	PRODUCT TYPE
86025	CHIRALPAK IF	10	4.6	250	Analytical
86094	CHIRALPAK IF	10	2.1	150	Analytical
86122	CHIRALPAK IF	10	4.6	50	SFC Guard
86135	CHIRALPAK IF	10	10	250	SFC Semi-Prep
86145	CHIRALPAK IF	10	21	250	SFC Semi-Prep
86155	CHIRALPAK IF	10	50	250	SFC Preparative
86175	CHIRALPAK IF	10	30	250	SFC Semi-Prep
86311	CHIRALPAK IF	5	4.0	10	Guard Cartridges
86324	CHIRALPAK IF	5	4.6	150	Analytical
86325	CHIRALPAK IF	5	4.6	250	Analytical
86335	CHIRALPAK IF	5	10	250	Semi-Prep
86337	CHIRALPAK IF	5	10	20	Semi-Prep Guard
86345	CHIRALPAK IF	5	20	250	Semi-Prep
86375	CHIRALPAK IF	5	30	250	Semi-Prep
86394	CHIRALPAK IF	5	2.1	150	Analytical
86422	CHIRALPAK IF	5	4.6	50	SFC Guard
86423	CHIRALPAK IF	5	4.6	100	SFC Screening Column
86435	CHIRALPAK IF	5	10	250	SFC Semi-Prep
86445	CHIRALPAK IF	5	21	250	SFC Semi-Prep
86455	CHIRALPAK IF	5	50	250	SFC Preparative
86475	CHIRALPAK IF	5	30	250	SFC Semi-Prep

CHIRALPAK® IF-3

86511	CHIRALPAK IF-3	3	4.0	10	Guard Cartridges
86522	CHIRALPAK IF-3	3	4.6	50	Analytical
86523	CHIRALPAK IF-3	3	4.6	100	Analytical
86524	CHIRALPAK IF-3	3	4.6	150	Analytical
86525	CHIRALPAK IF-3	3	4.6	250	Analytical
86592	CHIRALPAK IF-3	3	2.1	50	Analytical
86593	CHIRALPAK IF-3	3	2.1	100	Analytical
86594	CHIRALPAK IF-3	3	2.1	150	Analytical
86595	CHIRALPAK IF-3	3	2.1	250	Analytical
86S82	CHIRALPAK IF-3	3	3.0	50	Analytical
86S83	CHIRALPAK IF-3	3	3.0	100	Analytical
86S84	CHIRALPAK IF-3	3	3.0	150	Analytical

CHIRALPAK® IG

87020	CHIRALPAK IG	20	1 kg	–	Bulk CSP
87225	CHIRALPAK IG	20	4.6	250	Method Development
87233	CHIRALPAK IG	20	10	100	SMB (set of 8)
87235	CHIRALPAK IG	20	10	250	Semi-Prep
87242	CHIRALPAK IG	20	21	50	Semi-Prep Guard
87245	CHIRALPAK IG	20	21	250	Semi-Prep
87255	CHIRALPAK IG	20	50	250	Semi-Prep
87256	CHIRALPAK IG	20	50	500	Preparative
87266	CHIRALPAK IG	20	100	500	Preparative
87275	CHIRALPAK IG	20	30	250	Semi-Prep
87935	CHIRALPAK IG	20	10	250	SFC Semi-Prep
87945	CHIRALPAK IG	20	21	250	SFC Semi-Prep

87955	CHIRALPAK IG	20	50	250	SFC Semi-Prep
87975	CHIRALPAK IG	20	30	250	SFC Semi-Prep
87010	CHIRALPAK IG	10	1 kg	–	Bulk CSP
87011	CHIRALPAK IG	10	4.0	10	Guard Cartridges
87024	CHIRALPAK IG	10	4.6	150	Analytical
87025	CHIRALPAK IG	10	4.6	250	Analytical
87094	CHIRALPAK IG	10	2.1	150	Analytical
87122	CHIRALPAK IG	10	4.6	50	SFC Guard
87135	CHIRALPAK IG	10	10	250	SFC Semi-Prep
87145	CHIRALPAK IG	10	21	250	SFC Semi-Prep
87155	CHIRALPAK IG	10	50	250	SFC Preparative
87175	CHIRALPAK IG	10	30	250	SFC Semi-Prep
87311	CHIRALPAK IG	5	4.0	10	Guard Cartridges
87324	CHIRALPAK IG	5	4.6	150	Analytical
87325	CHIRALPAK IG	5	4.6	250	Analytical
87335	CHIRALPAK IG	5	10	250	Semi-Prep
87337	CHIRALPAK IG	5	10	20	Semi-Prep Guard
87345	CHIRALPAK IG	5	20	250	Semi-Prep
87375	CHIRALPAK IG	5	30	250	Semi-Prep
87394	CHIRALPAK IG	5	2.1	150	Analytical
87422	CHIRALPAK IG	5	4.6	50	SFC Guard
87423	CHIRALPAK IG	5	4.6	100	SFC Screening Column
87435	CHIRALPAK IG	5	10	250	SFC Semi-Prep
87445	CHIRALPAK IG	5	21	250	SFC Semi-Prep
87455	CHIRALPAK IG	5	50	250	SFC Preparative
87475	CHIRALPAK IG	5	30	250	SFC Semi-Prep

CHIRALPAK® IG-3

87511	CHIRALPAK IG-3	3	4.0	10	Guard Cartridges
87522	CHIRALPAK IG-3	3	4.6	50	Analytical
87523	CHIRALPAK IG-3	3	4.6	100	Analytical
87524	CHIRALPAK IG-3	3	4.6	150	Analytical
87525	CHIRALPAK IG-3	3	4.6	250	Analytical
87592	CHIRALPAK IG-3	3	2.1	50	Analytical
87593	CHIRALPAK IG-3	3	2.1	100	Analytical
87594	CHIRALPAK IG-3	3	2.1	150	Analytical
87595	CHIRALPAK IG-3	3	2.1	250	Analytical
87S82	CHIRALPAK IG-3	3	3.0	50	Analytical
87S83	CHIRALPAK IG-3	3	3.0	100	Analytical
87S84	CHIRALPAK IG-3	3	3.0	150	Analytical

IMMOBILIZED COLUMNS FOR MPLC – METHOD DEVELOPMENT

80223	CHIRALPAK IA	20	4.6	100	Method Development
83223	CHIRALPAK IC	20	4.6	100	Method Development
84223	CHIRALPAK ID	20	4.6	100	Method Development
85223	CHIRALPAK IE	20	4.6	100	Method Development
86223	CHIRALPAK IF	20	4.6	100	Method Development

2017 Product List

PART NUMBER	PRODUCT NAME	PARTICLE SIZE (µm)	ID (mm)	LENGTH (mm)	PRODUCT TYPE
----------------	-----------------	-----------------------	------------	----------------	-----------------

IMMOBILIZED COLUMNS FOR MPLC

CHIRALFLASH

80M73	CHIRALFLASH IA	20	30	100	Semi-Prep
83M73	CHIRALFLASH IC	20	30	100	Semi-Prep
84M73	CHIRALFLASH ID	20	30	100	Semi-Prep
85M73	CHIRALFLASH IE	20	30	100	Semi-Prep
86M73	CHIRALFLASH IF	20	30	100	Semi-Prep

IMMOBILIZED CHIRAL TLC PLATES

2L-CHIRAL TLC

5ST5A	2L-ChiralTLC 5 (5-pkg/1 each)	20	200	100	Method Development
80T2A	2L-ChiralTLC IA (2-pkg)	20	200	100	Method Development
83T2A	2L-ChiralTLC IC (2-pkg)	20	200	100	Method Development
84T2A	2L-ChiralTLC ID (2-pkg)	20	200	100	Method Development
85T2A	2L-ChiralTLC IE (2-pkg)	20	200	100	Method Development
86T2A	2L-ChiralTLC IF (2-pkg)	20	200	100	Method Development

IMMOBILIZED PROTEIN-BASED COLUMNS*

CHIRALPAK® AGP

30711	CHIRALPAK AGP (2-pkg)	5	4.0	10	Guard Cartridges
30712	CHIRALPAK AGP	5	4.0	50	Analytical
30713	CHIRALPAK AGP	5	4.0	100	Analytical
30714	CHIRALPAK AGP	5	4.0	150	Analytical
30733	CHIRALPAK AGP	5	10	100	Semi-Prep
30734	CHIRALPAK AGP	5	10	150	Semi-Prep
30781	CHIRALPAK AGP (2-pkg)	5	3.0	10	Guard Cartridges
30782	CHIRALPAK AGP	5	3.0	50	Analytical
30783	CHIRALPAK AGP	5	3.0	100	Analytical
30784	CHIRALPAK AGP	5	3.0	150	Analytical
30791	CHIRALPAK AGP (2-pkg)	5	2.0	10	Guard Cartridges
30792	CHIRALPAK AGP	5	2.0	50	Analytical
30793	CHIRALPAK AGP	5	2.0	100	Analytical
30794	CHIRALPAK AGP	5	2.0	150	Analytical

CHIRALPAK® CBH

33711	CHIRALPAK CBH (2-pkg)	5	4.0	10	Guard Cartridges
33712	CHIRALPAK CBH	5	4.0	50	Analytical
33713	CHIRALPAK CBH	5	4.0	100	Analytical
33714	CHIRALPAK CBH	5	4.0	150	Analytical
33733	CHIRALPAK CBH	5	10	100	Semi-Prep
33734	CHIRALPAK CBH	5	10	150	Semi-Prep

PART NUMBER	PRODUCT NAME	PARTICLE SIZE (µm)	ID (mm)	LENGTH (mm)	PRODUCT TYPE
----------------	-----------------	-----------------------	------------	----------------	-----------------

33781	CHIRALPAK CBH (2-pkg)	5	3.0	10	Guard Cartridges
33782	CHIRALPAK CBH	5	3.0	50	Analytical
33783	CHIRALPAK CBH	5	3.0	100	Analytical
33784	CHIRALPAK CBH	5	3.0	150	Analytical
33791	CHIRALPAK CBH (2-pkg)	5	2.0	10	Guard Cartridges
33792	CHIRALPAK CBH	5	2.0	50	Analytical
33793	CHIRALPAK CBH	5	2.0	100	Analytical
33794	CHIRALPAK CBH	5	2.0	150	Analytical

CHIRALPAK® HSA

34711	CHIRALPAK HSA (2-pkg)	5	4.0	10	Guard Cartridges
34712	CHIRALPAK HSA	5	4.0	50	Analytical
34713	CHIRALPAK HSA	5	4.0	100	Analytical
34714	CHIRALPAK HSA	5	4.0	150	Analytical
34733	CHIRALPAK HSA	5	10	100	Semi-Prep
34734	CHIRALPAK HSA	5	10	150	Semi-Prep
34781	CHIRALPAK HSA (2-pkg)	5	3.0	10	Guard Cartridges
34782	CHIRALPAK HSA	5	3.0	50	Analytical
34783	CHIRALPAK HSA	5	3.0	100	Analytical
34784	CHIRALPAK HSA	5	3.0	150	Analytical
34791	CHIRALPAK HSA (2-pkg)	5	2.0	10	Guard Cartridges
34792	CHIRALPAK HSA	5	2.0	50	Analytical
34793	CHIRALPAK HSA	5	2.0	100	Analytical
34794	CHIRALPAK HSA	5	2.0	150	Analytical

CHIRALPAK® BSA

35711	CHIRALPAK BSA (2-pkg)	5	4.0	10	Guard Cartridges
35712	CHIRALPAK BSA	5	4.0	50	Analytical
35714	CHIRALPAK BSA	5	4.0	150	Analytical
35781	CHIRALPAK BSA (2-pkg)	5	3.0	10	Guard Cartridges
35782	CHIRALPAK BSA	5	3.0	50	Analytical
35791	CHIRALPAK BSA (2-pkg)	5	2.0	10	Guard Cartridges
35792	CHIRALPAK BSA	5	2.0	50	Analytical

CHIRALPAK® DSA

36711	CHIRALPAK DSA (2-pkg)	5	4.0	10	Guard Cartridges
36712	CHIRALPAK DSA	5	4.0	50	Analytical
36714	CHIRALPAK DSA	5	4.0	150	Analytical
36781	CHIRALPAK DSA (2-pkg)	5	3.0	10	Guard Cartridges
36782	CHIRALPAK DSA	5	3.0	50	Analytical
36791	CHIRALPAK DSA (2-pkg)	5	2.0	10	Guard Cartridges
36792	CHIRALPAK DSA	5	2.0	50	Analytical

* All guard cartridges for immobilized protein-based columns require a cartridge holder - part number 00081 (page 7)

PART NUMBER	PRODUCT NAME	PARTICLE SIZE (µm)	ID (mm)	LENGTH (mm)	PRODUCT TYPE
CHIRALPAK® MSA					
37712	CHIRALPAK MSA	5	4.0	50	Analytical
37782	CHIRALPAK MSA	5	3.0	50	Analytical

CHIRALPAK® RSA

38711	CHIRALPAK RSA (2-pkg)	5	4.0	10	Guard Cartridges
38712	CHIRALPAK RSA	5	4.0	50	Analytical
38714	CHIRALPAK RSA	5	4.0	150	Analytical
38781	CHIRALPAK RSA (2-pkg)	5	3.0	10	Guard Cartridges
38782	CHIRALPAK RSA	5	3.0	50	Analytical
38791	CHIRALPAK RSA (2-pkg)	5	2.0	10	Guard Cartridges
38792	CHIRALPAK RSA	5	2.0	50	Analytical

PROTEIN-BASED COLUMN ACCESSORIES

00081	Guard Cartridge Holder				Holder
000D1	Guard Column Coupler				Coupler
000D2	Micro Guard Column Coupler				Coupler
000D3	Column Fittings (5-pkg)				Fittings

COATED POLYSACCHARIDE CSPs AND COLUMNS***CHIRALCEL® OB**

12022	CHIRALCEL OB	10	4.6	50	Guard Column
12025	CHIRALCEL OB	10	4.6	250	Analytical

CHIRALCEL® OB-H

12311	CHIRALCEL OB-H	5	4.0	10	Guard Cartridges
12324	CHIRALCEL OB-H	5	4.6	150	Analytical
12325	CHIRALCEL OB-H	5	4.6	250	Analytical

CHIRALCEL® OC

13022	CHIRALCEL OC	10	4.6	50	Guard Column
13025	CHIRALCEL OC	10	4.6	250	Analytical

CHIRALCEL® OC-H

13311	CHIRALCEL OC-H	5	4.0	10	Guard Cartridges
13325	CHIRALCEL OC-H	5	4.6	250	Analytical

CHIRALCEL® OD

14010	CHIRALCEL OD	10	1kg	—	Bulk CSP
14020	CHIRALCEL OD	20	1 kg	—	Bulk CSP
14022	CHIRALCEL OD	10	4.6	50	Guard Column
14025	CHIRALCEL OD	10	4.6	250	Analytical
14035	CHIRALCEL OD	10	10	250	Semi-Prep
14045	CHIRALCEL OD	10	20	250	Semi-Prep
14225	CHIRALCEL OD	20	4.6	250	Method Development
14233	CHIRALCEL OD	20	10	100	SMB (set of 8)
14235	CHIRALCEL OD	20	10	250	Semi-Prep

PART NUMBER	PRODUCT NAME	PARTICLE SIZE (µm)	ID (mm)	LENGTH (mm)	PRODUCT TYPE
14242	CHIRALCEL OD	20	21	50	Semi-Prep Guard
14245	CHIRALCEL OD	20	21	250	Semi-Prep
14255	CHIRALCEL OD	20	50	250	Semi-Prep
14256	CHIRALCEL OD	20	50	500	Preparative
14266	CHIRALCEL OD	20	100	500	Preparative
14275	CHIRALCEL OD	20	30	250	Semi-Prep
14935	CHIRALCEL OD	20	10	250	SFC Semi-Prep
14945	CHIRALCEL OD	20	21	250	SFC Semi-Prep
14955	CHIRALCEL OD	20	50	250	SFC Semi-Prep
14975	CHIRALCEL OD	20	30	250	SFC Semi-Prep

CHIRALCEL® OD-H

14311	CHIRALCEL OD-H	5	4.0	10	Guard Cartridges
14324	CHIRALCEL OD-H	5	4.6	150	Analytical
14325	CHIRALCEL OD-H	5	4.6	250	Analytical
14335	CHIRALCEL OD-H	5	10	250	Semi-Prep
14345	CHIRALCEL OD-H	5	20	250	Semi-Prep
14375	CHIRALCEL OD-H	5	30	250	Semi-Prep
14394	CHIRALCEL OD-H	5	2.1	150	Analytical
14422	CHIRALCEL OD-H	5	4.6	50	SFC Guard
14423	CHIRALCEL OD-H	5	4.6	100	SFC Screening Column
14435	CHIRALCEL OD-H	5	10	250	SFC Semi-Prep
14445	CHIRALCEL OD-H	5	21	250	SFC Semi-Prep
14455	CHIRALCEL OD-H	5	50	250	SFC Preparative
14475	CHIRALCEL OD-H	5	30	250	SFC Semi-Prep

CHIRALCEL® OD-3

14511	CHIRALCEL OD-3	3	4.0	10	Guard Cartridges
14522	CHIRALCEL OD-3	3	4.6	50	Analytical
14523	CHIRALCEL OD-3	3	4.6	100	Analytical
14524	CHIRALCEL OD-3	3	4.6	150	Analytical
14525	CHIRALCEL OD-3	3	4.6	250	Analytical
14592	CHIRALCEL OD-3	3	2.1	50	Analytical
14593	CHIRALCEL OD-3	3	2.1	100	Analytical
14594	CHIRALCEL OD-3	3	2.1	150	Analytical
14595	CHIRALCEL OD-3	3	2.1	250	Analytical
14S82	CHIRALCEL OD-3	3	3.0	50	Analytical
14S83	CHIRALCEL OD-3	3	3.0	100	Analytical
14S84	CHIRALCEL OD-3	3	3.0	150	Analytical

CHIRALCEL® OD-R

14625	CHIRALCEL OD-R	10	4.6	250	Analytical
-------	----------------	----	-----	-----	------------

CHIRALCEL® OD-RH

14711	CHIRALCEL OD-RH	5	4.0	10	Guard Cartridges
14724	CHIRALCEL OD-RH	5	4.6	150	Analytical
14745	CHIRALCEL OD-RH	5	21	250	Semi-Prep Rev Ph
14794	CHIRALCEL OD-RH	5	2.1	150	Analytical

* All guard cartridges for coated polysaccharide columns require a cartridge holder - part number 00011 (page 13)
 Note: guard columns are stand alone columns and do not require a holder

2017 Product List

PART NUMBER	PRODUCT NAME	PARTICLE SIZE (µm)	ID (mm)	LENGTH (mm)	PRODUCT TYPE
CHIRALCEL® OD-3R					
14811	CHIRALCEL OD-3R	3	4.0	10	Guard Cartridges
14822	CHIRALCEL OD-3R	3	4.6	50	Analytical
14823	CHIRALCEL OD-3R	3	4.6	100	Analytical
14824	CHIRALCEL OD-3R	3	4.6	150	Analytical
14892	CHIRALCEL OD-3R	3	2.1	50	Analytical
14893	CHIRALCEL OD-3R	3	2.1	100	Analytical
14894	CHIRALCEL OD-3R	3	2.1	150	Analytical
14895	CHIRALCEL OD-3R	3	2.1	250	Analytical

CHIRALCEL® OF

15020	CHIRALCEL OF	20	1 kg	–	Bulk CSP
15022	CHIRALCEL OF	10	4.6	50	Guard Column
15025	CHIRALCEL OF	10	4.6	250	Analytical
15135	CHIRALCEL OF	10	10	250	SFC Semi-Prep
15145	CHIRALCEL OF	10	21	250	SFC Semi-Prep
15175	CHIRALCEL OF	10	30	250	SFC Semi-Prep
15256	CHIRALCEL OF	20	50	500	Preparative
15266	CHIRALCEL OF	20	100	500	Preparative

CHIRALCEL® OG

16022	CHIRALCEL OG	10	4.6	50	Guard Column
16025	CHIRALCEL OG	10	4.6	250	Analytical
16135	CHIRALCEL OG	10	10	250	SFC Semi-Prep
16145	CHIRALCEL OG	10	21	250	SFC Semi-Prep
16175	CHIRALCEL OG	10	30	250	SFC Semi-Prep

CHIRALCEL® OJ

17010	CHIRALCEL OJ	10	1 kg	–	Bulk CSP
17020	CHIRALCEL OJ	20	1 kg	–	Bulk CSP
17022	CHIRALCEL OJ	10	4.6	50	Guard Column
17025	CHIRALCEL OJ	10	4.6	250	Analytical
17035	CHIRALCEL OJ	10	10	250	Semi-Prep
17045	CHIRALCEL OJ	10	20	250	Semi-Prep
17225	CHIRALCEL OJ	20	4.6	250	Method Development
17233	CHIRALCEL OJ	20	10	100	SMB (set of 8)
17235	CHIRALCEL OJ	20	10	250	Semi-Prep
17242	CHIRALCEL OJ	20	21	50	Semi-Prep Guard
17245	CHIRALCEL OJ	20	21	250	Semi-Prep
17255	CHIRALCEL OJ	20	50	250	Semi-Prep
17256	CHIRALCEL OJ	20	50	500	Preparative
17266	CHIRALCEL OJ	20	100	500	Preparative
17275	CHIRALCEL OJ	20	30	250	Semi-Prep
17935	CHIRALCEL OJ	20	10	250	SFC Semi-Prep
17945	CHIRALCEL OJ	20	21	250	SFC Semi-Prep
17955	CHIRALCEL OJ	20	50	250	SFC Semi-Prep
17975	CHIRALCEL OJ	20	30	250	SFC Semi-Prep

PART NUMBER	PRODUCT NAME	PARTICLE SIZE (µm)	ID (mm)	LENGTH (mm)	PRODUCT TYPE
CHIRALCEL® OJ-H					
17311	CHIRALCEL OJ-H	5	4.0	10	Guard Cartridges
17324	CHIRALCEL OJ-H	5	4.6	150	Analytical
17325	CHIRALCEL OJ-H	5	4.6	250	Analytical
17335	CHIRALCEL OJ-H	5	10	250	Semi-Prep
17345	CHIRALCEL OJ-H	5	20	250	Semi-Prep
17375	CHIRALCEL OJ-H	5	30	250	Semi-Prep
17394	CHIRALCEL OJ-H	5	2.1	150	Analytical
17422	CHIRALCEL OJ-H	5	4.6	50	SFC Guard
17423	CHIRALCEL OJ-H	5	4.6	100	SFC Screening Column
17435	CHIRALCEL OJ-H	5	10	250	SFC Semi-Prep
17445	CHIRALCEL OJ-H	5	21	250	SFC Semi-Prep
17455	CHIRALCEL OJ-H	5	50	250	SFC Preparative
17475	CHIRALCEL OJ-H	5	30	250	SFC Semi-Prep

CHIRALCEL® OJ-3

17511	CHIRALCEL OJ-3	3	4.0	10	Guard Cartridges
17522	CHIRALCEL OJ-3	3	4.6	50	Analytical
17523	CHIRALCEL OJ-3	3	4.6	100	Analytical
17524	CHIRALCEL OJ-3	3	4.6	150	Analytical
17525	CHIRALCEL OJ-3	3	4.6	250	Analytical
17592	CHIRALCEL OJ-3	3	2.1	50	Analytical
17593	CHIRALCEL OJ-3	3	2.1	100	Analytical
17594	CHIRALCEL OJ-3	3	2.1	150	Analytical
17595	CHIRALCEL OJ-3	3	2.1	250	Analytical
17S82	CHIRALCEL OJ-3	3	3.0	50	Analytical
17S83	CHIRALCEL OJ-3	3	3.0	100	Analytical
17S84	CHIRALCEL OJ-3	3	3.0	150	Analytical

CHIRALCEL® OJ-RH

17711	CHIRALCEL OJ-RH	5	4.0	10	Guard Cartridges
17724	CHIRALCEL OJ-RH	5	4.6	150	Analytical
17745	CHIRALCEL OJ-RH	5	21	250	Semi-Prep Rev Ph
17794	CHIRALCEL OJ-RH	5	2.1	150	Analytical

CHIRALCEL® OJ-3R

17811	CHIRALCEL OJ-3R	3	4.0	10	Guard Cartridges
17822	CHIRALCEL OJ-3R	3	4.6	50	Analytical
17823	CHIRALCEL OJ-3R	3	4.6	100	Analytical
17824	CHIRALCEL OJ-3R	3	4.6	150	Analytical
17892	CHIRALCEL OJ-3R	3	2.1	50	Analytical
17893	CHIRALCEL OJ-3R	3	2.1	100	Analytical
17894	CHIRALCEL OJ-3R	3	2.1	150	Analytical
17895	CHIRALCEL OJ-3R	3	2.1	250	Analytical

CHIRALCEL® OK

18022	CHIRALCEL OK	10	4.6	50	Guard Column
18025	CHIRALCEL OK	10	4.6	250	Analytical

PART NUMBER	PRODUCT NAME	PARTICLE SIZE (µm)	ID (mm)	LENGTH (mm)	PRODUCT TYPE
CHIRALCEL® OX					
63010	CHIRALCEL OX	10	1 kg	–	Bulk CSP
63020	CHIRALCEL OX	20	1 kg	–	Bulk CSP
63225	CHIRALCEL OX	20	4.6	250	Method Development
63233	CHIRALCEL OX	20	10	100	SMB (set of 8)
63235	CHIRALCEL OX	20	10	250	Semi-Prep
63242	CHIRALCEL OX	20	21	50	Semi-Prep Guard
63245	CHIRALCEL OX	20	21	250	Semi-Prep
63255	CHIRALCEL OX	20	50	250	Semi-Prep
63256	CHIRALCEL OX	20	50	500	Preparative
63266	CHIRALCEL OX	20	100	500	Preparative
63275	CHIRALCEL OX	20	30	250	Semi-Prep
63935	CHIRALCEL OX	20	10	250	SFC Semi-Prep
63945	CHIRALCEL OX	20	21	250	SFC Semi-Prep
63955	CHIRALCEL OX	20	50	250	SFC Semi-Prep
63975	CHIRALCEL OX	20	30	250	SFC Semi-Prep

CHIRALCEL® OX-H

63311	CHIRALCEL OX-H	5	4.0	10	Guard Cartridges
63324	CHIRALCEL OX-H	5	4.6	150	Analytical
63325	CHIRALCEL OX-H	5	4.6	250	Analytical
63335	CHIRALCEL OX-H	5	10	250	Semi-Prep
63345	CHIRALCEL OX-H	5	20	250	Semi-Prep
63375	CHIRALCEL OX-H	5	30	250	Semi-Prep
63394	CHIRALCEL OX-H	5	2.1	150	Analytical
63422	CHIRALCEL OX-H	5	4.6	50	SFC Guard
63423	CHIRALCEL OX-H	5	4.6	100	SFC Screening Column
63435	CHIRALCEL OX-H	5	10	250	SFC Semi-Prep
63445	CHIRALCEL OX-H	5	21	250	SFC Semi-Prep
63455	CHIRALCEL OX-H	5	50	250	SFC Preparative
63475	CHIRALCEL OX-H	5	30	250	SFC Semi-Prep

CHIRALCEL® OX-3

63511	CHIRALCEL OX-3	3	4.0	10	Guard Cartridges
63522	CHIRALCEL OX-3	3	4.6	50	Analytical
63523	CHIRALCEL OX-3	3	4.6	100	Analytical
63524	CHIRALCEL OX-3	3	4.6	150	Analytical
63525	CHIRALCEL OX-3	3	4.6	250	Analytical
63592	CHIRALCEL OX-3	3	2.1	50	Analytical
63593	CHIRALCEL OX-3	3	2.1	100	Analytical
63594	CHIRALCEL OX-3	3	2.1	150	Analytical
63595	CHIRALCEL OX-3	3	2.1	250	Analytical
63S82	CHIRALCEL OX-3	3	3.0	50	Analytical
63S83	CHIRALCEL OX-3	3	3.0	100	Analytical
63S84	CHIRALCEL OX-3	3	3.0	150	Analytical

CHIRALCEL® OX-RH

63711	CHIRALCEL OX-RH	5	4.0	10	Guard Cartridges
63724	CHIRALCEL OX-RH	5	4.6	150	Analytical

PART NUMBER	PRODUCT NAME	PARTICLE SIZE (µm)	ID (mm)	LENGTH (mm)	PRODUCT TYPE
63745	CHIRALCEL OX-RH	5	21	250	Semi-Prep Rev Ph
63794	CHIRALCEL OX-RH	5	2.1	150	Analytical

CHIRALCEL® OX-3R

63811	CHIRALCEL OX-3R	3	4.0	10	Guard Cartridges
63822	CHIRALCEL OX-3R	3	4.6	50	Analytical
63823	CHIRALCEL OX-3R	3	4.6	100	Analytical
63824	CHIRALCEL OX-3R	3	4.6	150	Analytical
63892	CHIRALCEL OX-3R	3	2.1	50	Analytical
63893	CHIRALCEL OX-3R	3	2.1	100	Analytical
63894	CHIRALCEL OX-3R	3	2.1	150	Analytical
63895	CHIRALCEL OX-3R	3	2.1	250	Analytical

CHIRALCEL® OZ

42010	CHIRALCEL OZ	10	1 kg	–	Bulk CSP
42020	CHIRALCEL OZ	20	1 kg	–	Bulk CSP
42225	CHIRALCEL OZ	20	4.6	250	Method Development
42233	CHIRALCEL OZ	20	10	100	SMB (set of 8)
42235	CHIRALCEL OZ	20	10	250	Semi-Prep
42242	CHIRALCEL OZ	20	21	50	Semi-Prep Guard
42245	CHIRALCEL OZ	20	21	250	Semi-Prep
42255	CHIRALCEL OZ	20	50	250	Semi-Prep
42256	CHIRALCEL OZ	20	50	500	Preparative
42266	CHIRALCEL OZ	20	100	500	Preparative
42275	CHIRALCEL OZ	20	30	250	Semi-Prep
42935	CHIRALCEL OZ	20	10	250	SFC Semi-Prep
42945	CHIRALCEL OZ	20	21	250	SFC Semi-Prep
42955	CHIRALCEL OZ	20	50	250	SFC Semi-Prep
42975	CHIRALCEL OZ	20	30	250	SFC Semi-Prep

CHIRALCEL® OZ-H

42311	CHIRALCEL OZ-H	5	4.0	10	Guard Cartridges
42324	CHIRALCEL OZ-H	5	4.6	150	Analytical
42325	CHIRALCEL OZ-H	5	4.6	250	Analytical
42335	CHIRALCEL OZ-H	5	10	250	Semi-Prep
42345	CHIRALCEL OZ-H	5	20	250	Semi-Prep
42375	CHIRALCEL OZ-H	5	30	250	Semi-Prep
42394	CHIRALCEL OZ-H	5	2.1	150	Analytical
42422	CHIRALCEL OZ-H	5	4.6	50	SFC Guard
42423	CHIRALCEL OZ-H	5	4.6	100	SFC Screening Column
42435	CHIRALCEL OZ-H	5	10	250	SFC Semi-Prep
42445	CHIRALCEL OZ-H	5	21	250	SFC Semi-Prep
42455	CHIRALCEL OZ-H	5	50	250	SFC Preparative
42475	CHIRALCEL OZ-H	5	30	250	SFC Semi-Prep

CHIRALCEL® OZ-3

42511	CHIRALCEL OZ-3	3	4.0	10	Guard Cartridges
42522	CHIRALCEL OZ-3	3	4.6	50	Analytical
42523	CHIRALCEL OZ-3	3	4.6	100	Analytical

2017 Product List

PART NUMBER	PRODUCT NAME	PARTICLE SIZE (µm)	ID (mm)	LENGTH (mm)	PRODUCT TYPE
42524	CHIRALCEL OZ-3	3	4.6	150	Analytical
42525	CHIRALCEL OZ-3	3	4.6	250	Analytical
42592	CHIRALCEL OZ-3	3	2.1	50	Analytical
42593	CHIRALCEL OZ-3	3	2.1	100	Analytical
42594	CHIRALCEL OZ-3	3	2.1	150	Analytical
42595	CHIRALCEL OZ-3	3	2.1	250	Analytical
42S82	CHIRALCEL OZ-3	3	3.0	50	Analytical
42S83	CHIRALCEL OZ-3	3	3.0	100	Analytical
42S84	CHIRALCEL OZ-3	3	3.0	150	Analytical

CHIRALCEL® OZ-RH

42711	CHIRALCEL OZ-RH	5	4.0	10	Guard Cartridges
42724	CHIRALCEL OZ-RH	5	4.6	150	Analytical
42745	CHIRALCEL OZ-RH	5	21	250	Semi-Prep Rev Ph
42794	CHIRALCEL OZ-RH	5	2.1	150	Analytical

CHIRALCEL® OZ-3R

42811	CHIRALCEL OZ-3R	3	4.0	10	Guard Cartridges
42822	CHIRALCEL OZ-3R	3	4.6	50	Analytical
42823	CHIRALCEL OZ-3R	3	4.6	100	Analytical
42824	CHIRALCEL OZ-3R	3	4.6	150	Analytical
42892	CHIRALCEL OZ-3R	3	2.1	50	Analytical
42893	CHIRALCEL OZ-3R	3	2.1	100	Analytical
42894	CHIRALCEL OZ-3R	3	2.1	150	Analytical
42895	CHIRALCEL OZ-3R	3	2.1	250	Analytical

CHIRALPAK® AD

19010	CHIRALPAK AD	10	1 kg	–	Bulk CSP
19020	CHIRALPAK AD	20	1 kg	–	Bulk CSP
19022	CHIRALPAK AD	10	4.6	50	Guard Column
19025	CHIRALPAK AD	10	4.6	250	Analytical
19035	CHIRALPAK AD	10	10	250	Semi-Prep
19045	CHIRALPAK AD	10	20	250	Semi-Prep
19094	CHIRALPAK AD	10	2.1	150	Analytical
19225	CHIRALPAK AD	20	4.6	250	Method Development
19233	CHIRALPAK AD	20	10	100	SMB (set of 8)
19235	CHIRALPAK AD	20	10	250	Semi-Prep
19242	CHIRALPAK AD	20	21	50	Semi-Prep Guard
19245	CHIRALPAK AD	20	21	250	Semi-Prep
19255	CHIRALPAK AD	20	50	250	Semi-Prep
19256	CHIRALPAK AD	20	50	500	Preparative
19266	CHIRALPAK AD	20	100	500	Preparative
19275	CHIRALPAK AD	20	30	250	Semi-Prep
19935	CHIRALPAK AD	20	10	250	SFC Semi-Prep
19945	CHIRALPAK AD	20	21	250	SFC Semi-Prep
19955	CHIRALPAK AD	20	50	250	SFC Semi-Prep
19975	CHIRALPAK AD	20	30	250	SFC Semi-Prep

CHIRALPAK® AD-H

19311	CHIRALPAK AD-H	5	4.0	10	Guard Cartridges
19324	CHIRALPAK AD-H	5	4.6	150	Analytical

19325	CHIRALPAK AD-H	5	4.6	250	Analytical
19335	CHIRALPAK AD-H	5	10	250	Semi-Prep
19345	CHIRALPAK AD-H	5	20	250	Semi-Prep
19375	CHIRALPAK AD-H	5	30	250	Semi-Prep
19394	CHIRALPAK AD-H	5	2.1	150	Analytical
19422	CHIRALPAK AD-H	5	4.6	50	SFC Guard
19423	CHIRALPAK AD-H	5	4.6	100	SFC Screening Column
19435	CHIRALPAK AD-H	5	10	250	SFC Semi-Prep
19445	CHIRALPAK AD-H	5	21	250	SFC Semi-Prep
19455	CHIRALPAK AD-H	5	50	250	SFC Preparative
19475	CHIRALPAK AD-H	5	30	250	SFC Semi-Prep

CHIRALPAK® AD-3

19511	CHIRALPAK AD-3	3	4.0	10	Guard Cartridges
19522	CHIRALPAK AD-3	3	4.6	50	Analytical
19523	CHIRALPAK AD-3	3	4.6	100	Analytical
19524	CHIRALPAK AD-3	3	4.6	150	Analytical
19525	CHIRALPAK AD-3	3	4.6	250	Analytical
19592	CHIRALPAK AD-3	3	2.1	50	Analytical
19593	CHIRALPAK AD-3	3	2.1	100	Analytical
19594	CHIRALPAK AD-3	3	2.1	150	Analytical
19595	CHIRALPAK AD-3	3	2.1	250	Analytical
19S82	CHIRALPAK AD-3	3	3.0	50	Analytical
19S83	CHIRALPAK AD-3	3	3.0	100	Analytical
19S84	CHIRALPAK AD-3	3	3.0	150	Analytical

CHIRALPAK® AD-RH

19711	CHIRALPAK AD-RH	5	4.0	10	Guard Cartridges
19724	CHIRALPAK AD-RH	5	4.6	150	Analytical
19745	CHIRALPAK AD-RH	5	21	250	Semi-Prep Rev Ph
19794	CHIRALPAK AD-RH	5	2.1	150	Analytical

CHIRALPAK® AD-3R

19811	CHIRALPAK AD-3R	3	4.0	10	Guard Cartridges
19822	CHIRALPAK AD-3R	3	4.6	50	Analytical
19823	CHIRALPAK AD-3R	3	4.6	100	Analytical
19824	CHIRALPAK AD-3R	3	4.6	150	Analytical
19892	CHIRALPAK AD-3R	3	2.1	50	Analytical
19893	CHIRALPAK AD-3R	3	2.1	100	Analytical
19894	CHIRALPAK AD-3R	3	2.1	150	Analytical
19895	CHIRALPAK AD-3R	3	2.1	250	Analytical

CHIRALPAK® AS

20010	CHIRALPAK AS	10	1 kg	–	Bulk CSP
20020	CHIRALPAK AS	20	1 kg	–	Bulk CSP
20022	CHIRALPAK AS	10	4.6	50	Guard Column
20025	CHIRALPAK AS	10	4.6	250	Analytical
20035	CHIRALPAK AS	10	10	250	Semi-Prep
20045	CHIRALPAK AS	10	20	250	Semi-Prep
20225	CHIRALPAK AS	20	4.6	250	Method Development
20233	CHIRALPAK AS	20	10	100	SMB (set of 8)

PART NUMBER	PRODUCT NAME	PARTICLE SIZE (µm)	ID (mm)	LENGTH (mm)	PRODUCT TYPE
20235	CHIRALPAK AS	20	10	250	Semi-Prep
20242	CHIRALPAK AS	20	21	50	Semi-Prep Guard
20245	CHIRALPAK AS	20	21	250	Semi-Prep
20255	CHIRALPAK AS	20	50	250	Semi-Prep
20256	CHIRALPAK AS	20	50	500	Preparative
20266	CHIRALPAK AS	20	100	500	Preparative
20275	CHIRALPAK AS	20	30	250	Semi-Prep
20935	CHIRALPAK AS	20	10	250	SFC Semi-Prep
20945	CHIRALPAK AS	20	21	250	SFC Semi-Prep
20955	CHIRALPAK AS	20	50	250	SFC Semi-Prep
20975	CHIRALPAK AS	20	30	250	SFC Semi-Prep

CHIRALPAK® AS-H

20311	CHIRALPAK AS-H	5	4.0	10	Guard Cartridges
20324	CHIRALPAK AS-H	5	4.6	150	Analytical
20325	CHIRALPAK AS-H	5	4.6	250	Analytical
20335	CHIRALPAK AS-H	5	10	250	Semi-Prep
20345	CHIRALPAK AS-H	5	20	250	Semi-Prep
20375	CHIRALPAK AS-H	5	30	250	Semi-Prep
20394	CHIRALPAK AS-H	5	2.1	150	Analytical
20422	CHIRALPAK AS-H	5	4.6	50	SFC Guard
20423	CHIRALPAK AS-H	5	4.6	100	SFC Screening Column
20435	CHIRALPAK AS-H	5	10	250	SFC Semi-Prep
20445	CHIRALPAK AS-H	5	21	250	SFC Semi-Prep
20455	CHIRALPAK AS-H	5	50	250	SFC Preparative
20475	CHIRALPAK AS-H	5	30	250	SFC Semi-Prep

CHIRALPAK® AS-3

20511	CHIRALPAK AS-3	3	4.0	10	Guard Cartridges
20522	CHIRALPAK AS-3	3	4.6	50	Analytical
20523	CHIRALPAK AS-3	3	4.6	100	Analytical
20524	CHIRALPAK AS-3	3	4.6	150	Analytical
20525	CHIRALPAK AS-3	3	4.6	250	Analytical
20592	CHIRALPAK AS-3	3	2.1	50	Analytical
20593	CHIRALPAK AS-3	3	2.1	100	Analytical
20594	CHIRALPAK AS-3	3	2.1	150	Analytical
20595	CHIRALPAK AS-3	3	2.1	250	Analytical
20S82	CHIRALPAK AS-3	3	3.0	50	Analytical
20S83	CHIRALPAK AS-3	3	3.0	100	Analytical
20S84	CHIRALPAK AS-3	3	3.0	150	Analytical

CHIRALPAK® AS-RH

20711	CHIRALPAK AS-RH	5	4.0	10	Guard Cartridges
20724	CHIRALPAK AS-RH	5	4.6	150	Analytical
20745	CHIRALPAK AS-RH	5	21	250	Semi-Prep Rev Ph
20794	CHIRALPAK AS-RH	5	2.1	150	Analytical

CHIRALPAK® AS-3R

20811	CHIRALPAK AS-3R	3	4.0	10	Guard Cartridges
20822	CHIRALPAK AS-3R	3	4.6	50	Analytical

20823	CHIRALPAK AS-3R	3	4.6	100	Analytical
20824	CHIRALPAK AS-3R	3	4.6	150	Analytical
20892	CHIRALPAK AS-3R	3	2.1	50	Analytical
20893	CHIRALPAK AS-3R	3	2.1	100	Analytical
20894	CHIRALPAK AS-3R	3	2.1	150	Analytical
20895	CHIRALPAK AS-3R	3	2.1	250	Analytical

CHIRALPAK® AY

47010	CHIRALPAK AY	10	1 kg	–	Bulk CSP
47020	CHIRALPAK AY	20	1 kg	–	Bulk CSP
47225	CHIRALPAK AY	20	4.6	250	Method Development
47233	CHIRALPAK AY	20	10	100	SMB (set of 8)
47235	CHIRALPAK AY	20	10	250	Semi-Prep
47242	CHIRALPAK AY	20	21	50	Semi-Prep Guard
47245	CHIRALPAK AY	20	21	250	Semi-Prep
47255	CHIRALPAK AY	20	50	250	Semi-Prep
47256	CHIRALPAK AY	20	50	500	Preparative
47266	CHIRALPAK AY	20	100	500	Preparative
47275	CHIRALPAK AY	20	30	250	Semi-Prep
47935	CHIRALPAK AY	20	10	250	SFC Semi-Prep
47945	CHIRALPAK AY	20	21	250	SFC Semi-Prep
47955	CHIRALPAK AY	20	50	250	SFC Semi-Prep
47975	CHIRALPAK AY	20	30	250	SFC Semi-Prep

CHIRALPAK® AY-H

47311	CHIRALPAK AY-H	5	4.0	10	Guard Cartridges
47324	CHIRALPAK AY-H	5	4.6	150	Analytical
47325	CHIRALPAK AY-H	5	4.6	250	Analytical
47335	CHIRALPAK AY-H	5	10	250	Semi-Prep
47345	CHIRALPAK AY-H	5	20	250	Semi-Prep
47375	CHIRALPAK AY-H	5	30	250	Semi-Prep
47394	CHIRALPAK AY-H	5	2.1	150	Analytical
47422	CHIRALPAK AY-H	5	4.6	50	SFC Guard
47423	CHIRALPAK AY-H	5	4.6	100	SFC Screening Column
47435	CHIRALPAK AY-H	5	10	250	SFC Semi-Prep
47445	CHIRALPAK AY-H	5	21	250	SFC Semi-Prep
47455	CHIRALPAK AY-H	5	50	250	SFC Preparative
47475	CHIRALPAK AY-H	5	30	250	SFC Semi-Prep

CHIRALPAK® AY-3

47511	CHIRALPAK AY-3	3	4.0	10	Guard Cartridges
47522	CHIRALPAK AY-3	3	4.6	50	Analytical
47523	CHIRALPAK AY-3	3	4.6	100	Analytical
47524	CHIRALPAK AY-3	3	4.6	150	Analytical
47525	CHIRALPAK AY-3	3	4.6	250	Analytical
47592	CHIRALPAK AY-3	3	2.1	50	Analytical
47593	CHIRALPAK AY-3	3	2.1	100	Analytical
47594	CHIRALPAK AY-3	3	2.1	150	Analytical
47595	CHIRALPAK AY-3	3	2.1	250	Analytical
47S82	CHIRALPAK AY-3	3	3.0	50	Analytical

2017 Product List

PART NUMBER	PRODUCT NAME	PARTICLE SIZE (µm)	ID (mm)	LENGTH (mm)	PRODUCT TYPE
47S83	CHIRALPAK AY-3	3	3.0	100	Analytical
47S84	CHIRALPAK AY-3	3	3.0	150	Analytical

CHIRALPAK® AY-RH

47711	CHIRALPAK AY-RH	5	4.0	10	Guard Cartridges
47724	CHIRALPAK AY-RH	5	4.6	150	Analytical
47745	CHIRALPAK AY-RH	5	21	250	Semi-Prep Rev Ph
47794	CHIRALPAK AY-RH	5	2.1	150	Analytical

CHIRALPAK® AY-3R

47811	CHIRALPAK AY-3R	3	4.0	10	Guard Cartridges
47822	CHIRALPAK AY-3R	3	4.6	50	Analytical
47823	CHIRALPAK AY-3R	3	4.6	100	Analytical
47824	CHIRALPAK AY-3R	3	4.6	150	Analytical
47892	CHIRALPAK AY-3R	3	2.1	50	Analytical
47893	CHIRALPAK AY-3R	3	2.1	100	Analytical
47894	CHIRALPAK AY-3R	3	2.1	150	Analytical
47895	CHIRALPAK AY-3R	3	2.1	250	Analytical

CHIRALPAK® AZ

61010	CHIRALPAK AZ	10	1 kg	–	Bulk CSP
61020	CHIRALPAK AZ	20	1 kg	–	Bulk CSP
61225	CHIRALPAK AZ	20	4.6	250	Method Development
61233	CHIRALPAK AZ	20	10	100	SMB (set of 8)
61235	CHIRALPAK AZ	20	10	250	Semi-Prep
61242	CHIRALPAK AZ	20	21	50	Semi-Prep Guard
61245	CHIRALPAK AZ	20	21	250	Semi-Prep
61255	CHIRALPAK AZ	20	50	250	Preparative
61256	CHIRALPAK AZ	20	50	500	Preparative
61266	CHIRALPAK AZ	20	100	500	Preparative
61275	CHIRALPAK AZ	20	30	250	Preparative
61935	CHIRALPAK AZ	20	10	250	SFC Semi-Prep
61945	CHIRALPAK AZ	20	21	250	SFC Semi-Prep
61955	CHIRALPAK AZ	20	50	250	SFC Semi-Prep
61975	CHIRALPAK AZ	20	30	250	SFC Semi-Prep

CHIRALPAK® AZ-H

61311	CHIRALPAK AZ-H	5	4.0	10	Guard Cartridges
61324	CHIRALPAK AZ-H	5	4.6	150	Analytical
61325	CHIRALPAK AZ-H	5	4.6	250	Analytical
61335	CHIRALPAK AZ-H	5	10	250	Semi-Prep
61345	CHIRALPAK AZ-H	5	20	250	Semi-Prep
61375	CHIRALPAK AZ-H	5	30	250	Semi-Prep
61394	CHIRALPAK AZ-H	5	2.1	150	Analytical
61422	CHIRALPAK AZ-H	5	4.6	50	SFC Guard
61423	CHIRALPAK AZ-H	5	4.6	100	SFC Screening Column
61435	CHIRALPAK AZ-H	5	10	250	SFC Semi-Prep
61445	CHIRALPAK AZ-H	5	21	250	SFC Semi-Prep
61455	CHIRALPAK AZ-H	5	50	250	SFC Preparative
61475	CHIRALPAK AZ-H	5	30	250	SFC Semi-Prep

PART NUMBER	PRODUCT NAME	PARTICLE SIZE (µm)	ID (mm)	LENGTH (mm)	PRODUCT TYPE
61511	CHIRALPAK AZ-3	3	4.0	10	Guard Cartridges
61522	CHIRALPAK AZ-3	3	4.6	50	Analytical
61523	CHIRALPAK AZ-3	3	4.6	100	Analytical
61524	CHIRALPAK AZ-3	3	4.6	150	Analytical
61525	CHIRALPAK AZ-3	3	4.6	250	Analytical
61592	CHIRALPAK AZ-3	3	2.1	50	Analytical
61593	CHIRALPAK AZ-3	3	2.1	100	Analytical
61594	CHIRALPAK AZ-3	3	2.1	150	Analytical
61595	CHIRALPAK AZ-3	3	2.1	250	Analytical
61S82	CHIRALPAK AZ-3	3	3.0	50	Analytical
61S83	CHIRALPAK AZ-3	3	3.0	100	Analytical
61S84	CHIRALPAK AZ-3	3	3.0	150	Analytical

CHIRALPAK® AZ-RH

61711	CHIRALPAK AZ-RH	5	4.0	10	Guard Cartridges
61724	CHIRALPAK AZ-RH	5	4.6	150	Analytical
61745	CHIRALPAK AZ-RH	5	21	250	Semi-Prep Rev Ph
61794	CHIRALPAK AZ-RH	5	2.1	150	Analytical

CHIRALPAK® AZ-3R

61811	CHIRALPAK AZ-3R	3	4.0	10	Guard Cartridges
61822	CHIRALPAK AZ-3R	3	4.6	50	Analytical
61823	CHIRALPAK AZ-3R	3	4.6	100	Analytical
61824	CHIRALPAK AZ-3R	3	4.6	150	Analytical
61892	CHIRALPAK AZ-3R	3	2.1	50	Analytical
61893	CHIRALPAK AZ-3R	3	2.1	100	Analytical
61894	CHIRALPAK AZ-3R	3	2.1	150	Analytical
61895	CHIRALPAK AZ-3R	3	2.1	250	Analytical

CROWN ETHER COLUMNS

CROWNPAK® CR-I

53784	CROWNPAK CR-I(+)	5	3.0	150	Analytical
54784	CROWNPAK CR-I(–)	5	3.0	150	Analytical

CROWNPAK® CR

27711	CROWNPAK CR	5	4.0	10	Guard Column
27714	CROWNPAK CR(+)	5	4.0	150	Analytical
28714	CROWNPAK CR(–)	5	4.0	150	Analytical

ZWITTERIONIC COLUMNS

CHIRALPAK® ZWIX(+)

51334	CHIRALPAK ZWIX(+)	5	10	150	Semi-Prep
51335	CHIRALPAK ZWIX(+)	5	10	250	Semi-Prep
51344	CHIRALPAK ZWIX(+)	5	21	150	Semi-Prep
51345	CHIRALPAK ZWIX(+)	5	21	250	Semi-Prep
51514	CHIRALPAK ZWIX(+)	3	4.0	150	Analytical
51515	CHIRALPAK ZWIX(+)	3	4.0	250	Analytical
51584	CHIRALPAK ZWIX(+)	3	3.0	150	Analytical
51585	CHIRALPAK ZWIX(+)	3	3.0	250	Analytical

PART NUMBER	PRODUCT NAME	PARTICLE SIZE (µm)	ID (mm)	LENGTH (mm)	PRODUCT TYPE
CHIRALPAK® ZWIX(-)					
52334	CHIRALPAK ZWIX(-)	5	10	150	Semi-Prep
52335	CHIRALPAK ZWIX(-)	5	10	250	Semi-Prep
52344	CHIRALPAK ZWIX(-)	5	21	150	Semi-Prep
52345	CHIRALPAK ZWIX(-)	5	21	250	Semi-Prep
52514	CHIRALPAK ZWIX(-)	3	4.0	150	Analytical
52515	CHIRALPAK ZWIX(-)	3	4.0	250	Analytical
52584	CHIRALPAK ZWIX(-)	3	3.0	150	Analytical
52585	CHIRALPAK ZWIX(-)	3	3.0	250	Analytical

ANION EXCHANGE COLUMNS

31311	CHIRALPAK QD-AX	5	4.0	10	Guard Cartridges
31324	CHIRALPAK QD-AX	5	4.6	150	Analytical
31344	CHIRALPAK QD-AX	5	20	150	HPLC Semi-Prep
31394	CHIRALPAK QD-AX	5	2.1	150	Analytical
32311	CHIRALPAK QN-AX	5	4.0	10	Guard Cartridges
32324	CHIRALPAK QN-AX	5	4.6	150	Analytical
32344	CHIRALPAK QN-AX	5	20	150	HPLC Semi-Prep
32394	CHIRALPAK QN-AX	5	2.1	150	Analytical

LIGAND EXCHANGE COLUMNS

CHIRALPAK® MA(+)

21822	CHIRALPAK MA(+)	3	4.6	50	Analytical
-------	-----------------	---	-----	----	------------

CHIRALPAK® WH

25622	CHIRALPAK WH	10	4.6	50	Guard Column
25625	CHIRALPAK WH	10	4.6	250	Analytical

PART NUMBER	PRODUCT NAME	PARTICLE SIZE (µm)	ID (mm)	LENGTH (mm)	PRODUCT TYPE
SFC ACHIRAL COLUMNS					
AA424	DCpak SFC-A	5	4.6	150	Analytical
AA425	DCpak SFC-A	5	4.6	250	Analytical
AA435	DCpak SFC-A	5	10	250	SFC Semi-Prep
AA445	DCpak SFC-A	5	21	250	SFC Semi-Prep
AA494	DCpak SFC-A	5	2.1	150	Analytical
AA495	DCpak SFC-A	5	2.1	250	Analytical
AB424	DCpak SFC-B	5	4.6	150	Analytical
AB425	DCpak SFC-B	5	4.6	250	Analytical
AB435	DCpak SFC-B	5	10	250	SFC Semi-Prep
AB445	DCpak SFC-B	5	21	250	SFC Semi-Prep
AB494	DCpak SFC-B	5	2.1	150	Analytical
AB495	DCpak SFC-B	5	2.1	250	Analytical

COLUMN ACCESSORIES

00011	Cartridge Holder	—	4.0	10	Holder
00024	Column Jacket, 15 cm	—	4.6	150	Jacket
00025	Column Jacket, 25 cm	—	4.6	250	Jacket
00060 [†]	Pre Column Filter Assembly	—	21.2	—	Holder and Filter
00061	Pre Column Filter, 2 micron	—	21.2	—	Replacement Filter
00062	Assembly O-Rings	—	—	—	Replacement O-Rings, set of 2
FK002	Guard Filter Kit (1 holder, 3 glass filters, 2 fittings and 1 tubing)	—	—	—	Guard Filter
FR002	Replacement Guard Filters (x6)	—	—	—	Guard Filters

[†]Free with 2 and 3 cm SFC column orders

CHIRAL TECHNOLOGIES, INC. STANDARD TERMS AND CONDITIONS OF SALE

The following terms and conditions (the "Terms and Conditions") apply to all sales of chiral chromatography products (collectively, the "Products") by Chiral Technologies, Inc. ("CHIRAL") to its customers (each, a "CUSTOMER"). References to a "Party" or to the "Parties" herein shall mean either CHIRAL or CUSTOMER or each of them together. Each of the Parties agrees that it is entering into this agreement for the purpose of purchasing or selling, as the case may be, the Products, which the CUSTOMER shall only use for research purposes and not in connection with any other medical, clinical or other use. By ordering or accepting any Products from CHIRAL, CUSTOMER agrees to the foregoing and to be legally bound as follows:

SECTION 1. FORMATION OF THE CONTRACT. An agreement between the Parties, if made and entered into by way of a purchase order and an acceptance thereof, shall be deemed to have been made and entered into when CUSTOMER has issued a written purchase order and CHIRAL has issued a written acceptance of said purchase order. Any alteration and/or supplement to any purchase order shall be valid only if such alteration and/or supplement is confirmed in writing by CHIRAL.

SECTION 2. QUOTATIONS. Unless otherwise specified in a written statement signed by CHIRAL, no price quote by CHIRAL shall be binding. Any binding price quote given by CHIRAL shall be effective for thirty (30) days, unless otherwise specified in a written statement signed by CHIRAL.

SECTION 3. TERMS OF PAYMENT. CHIRAL will invoice CUSTOMER for Products upon shipment. All payments owed by CUSTOMER to CHIRAL, including, without limitation, payment for the purchase price of Products purchased, applicable taxes, and cancellation charges, are payable in U.S. Dollars and will be due thirty (30) days after the invoice date of the Products. Interest shall accrue at the rate of ten percent (10%) per annum on the amount due commencing thirty (30) days after the invoice date; provided that, in the event that such interest rate violates applicable usury laws, such rate shall be reduced to the highest rate (if any) allowed by such laws.

SECTION 4. DELIVERY OF PRODUCTS; CANCELLATION AND DELAYED ORDERS. CHIRAL and CUSTOMER shall agree on a mutually convenient delivery schedule for Products. All Products shall be shipped F.O.B. CHIRAL's facility. CHIRAL reserves the right to ship Products prior to the agreed shipment date in order to accommodate CHIRAL's overall delivery schedules. CUSTOMER shall have no right to cancel any purchase order or to reschedule any scheduled delivery of Products covered by a purchase order, except with CHIRAL's written permission.

SECTION 5. INSPECTION. Upon receipt of Products, CUSTOMER shall promptly inspect such Products. If upon such inspection, CUSTOMER finds any Products to be defective, CUSTOMER shall promptly provide CHIRAL with written notification of such condition.

SECTION 6. TRADEMARKS. CUSTOMER shall not remove from the Products (or their packaging or documentation), or alter, any of CHIRAL's trademarks, trade names, logos, patent or copyright notices, or other notices or markings, or add any other notices or markings to the Products, without the prior express written consent of CHIRAL.

SECTION 7. LIMITED WARRANTY.

A. WARRANTY TERMS. Subject to the provisions of this Section 7 and Section 8 below, with respect to each Product sold by CHIRAL hereunder, CHIRAL warrants that for a period of one (1) year from the date of sale (the "Warranty Period") such Product shall be free from defects in materials or faulty workmanship and shall comply with quality specifications for such Product published by CHIRAL. The warranties provided by CHIRAL in this Section 7.A are the only warranties provided by CHIRAL with respect to the Products sold hereunder, and may be modified or amended only by a written instrument signed by CHIRAL and accepted by CUSTOMER.

B. WARRANTY CLAIMS. If, during the applicable Warranty Period for a Product sold by CHIRAL hereunder, it is determined that Product does not conform to the limited warranty set forth in Section 7.A, then CUSTOMER shall notify CHIRAL of such condition and request authorization to return the Product to exercise the CUSTOMER'S warranty rights. CUSTOMER may, after obtaining a return authorization number and shipping instructions from CHIRAL, return such Product to CHIRAL. Upon receipt of any such Product during the applicable Warranty Period, CHIRAL shall, at its option and expense (1) repair or replace such Product, and ship such Product to the location from which it was returned to CHIRAL, or (2) give CUSTOMER a credit for such Product. All replaced Products or Products returned to CHIRAL for credit shall become CHIRAL's property. Repair or replacement of a Product does not extend the Warranty Period for such Product.

C. OTHER LIMITATIONS. THE EXPRESS LIMITED WARRANTIES OF CHIRAL STATED IN SECTION 7.A ABOVE DO NOT APPLY TO (1) PROTEIN-BASED PRODUCTS, (2) PRODUCTS USED FOR MEDICAL, CLINICAL OR ANY OTHER USE OTHER THAN RESEARCH USE, (3) PRODUCTS WHICH HAVE BEEN IMPROPERLY TRANSPORTED, INSTALLED OR USED, STORED, ALTERED, MODIFIED, REPAIRED OR SERVICED IN ANY RESPECT, EXCEPT BY CHIRAL OR ITS REPRESENTATIVES, (4) PRODUCTS WHERE SERIAL NUMBERS HAVE BEEN REMOVED OR ALTERED, (5) PRODUCTS USED BY ANY PERSON OR ENTITY OTHER THAN CUSTOMER, OR (6) PRODUCTS THE INVOICE FOR WHICH HAS NOT BEEN PAID IN FULL IN ACCORDANCE WITH THE PAYMENT TERMS. NO ACTION BY CUSTOMER ARISING UNDER SECTION 7.A ABOVE OR OTHERWISE IN CONNECTION WITH THE SALE OF THE PRODUCTS MAY BE BROUGHT MORE THAN ONE (1) YEAR AFTER THE CAUSE OF ACTION FIRST ARISES.

D. DISCLAIMER. THE EXPRESS WARRANTIES OF CHIRAL STATED IN SECTION 7.A ABOVE ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT OF THIRD PARTY RIGHTS. THE EXPRESS OBLIGATIONS OF CHIRAL STATED IN SECTION 7.A ABOVE ARE IN LIEU OF ANY OTHER LIABILITY OR OBLIGATION OF CHIRAL, INCLUDING, WITHOUT LIMITATION, ANY LIABILITY OR OBLIGATION FOR DAMAGE, LOSS OR INJURY (WHETHER DIRECT, INDIRECT, EXEMPLARY, SPECIAL, CONSEQUENTIAL OR INCIDENTAL) ARISING OUT OF OR IN CONNECTION WITH THE DELIVERY, USE OR PERFORMANCE OF THE PRODUCTS.

SECTION 8. LIMITATION OF LIABILITY. NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED IN THESE TERMS AND CONDITIONS: CHIRAL SHALL NOT BE LIABLE FOR ANY EXEMPLARY, SPECIAL, INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES OF ANY KIND (INCLUDING, WITHOUT LIMITATION, LOST PROFITS), EVEN IF CHIRAL HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE FOREGOING STATES THE ENTIRE LIABILITY OF CHIRAL WITH REGARD TO THESE TERMS AND CONDITIONS AND THE PRODUCTS. THE LIMITATIONS OF LIABILITY CONTAINED IN SECTION 7 AND THIS SECTION 8 ARE A FUNDAMENTAL PART OF THE BASIS OF CHIRAL'S BARGAIN HEREUNDER, AND CHIRAL WOULD NOT SELL THE PRODUCTS ASSENT SUCH LIMITATIONS.

SECTION 9. GENERAL.

A. ENTIRE AGREEMENT. These Terms and Conditions constitute the final, complete and exclusive agreement between the Parties relating to the subject matter hereof, and supersede all prior or contemporaneous proposals, understandings, representations, warranties, promises and other communications, whether oral or written, relating to such subject matter (including, without limitation, any prior "Standard Terms and Conditions" published by CHIRAL). Except for agreements of the Parties set forth in writing and signed by an authorized representative of CHIRAL relating to the type, quantity, quality/specifications, delivery, forecasting schedule and pricing of any Product, any term or condition in any purchase order, confirmation or other document furnished by CUSTOMER at any time which is in any way inconsistent with or in addition to the terms and conditions set forth herein is hereby expressly rejected, and CHIRAL's acceptance of any purchase order of CUSTOMER is expressly made in reliance on CUSTOMER's assent to all terms and conditions hereof. No deviation from these Terms and Conditions shall be valid unless confirmed in writing by an authorized representative of CHIRAL.

B. GOVERNING LAW. These Terms and Conditions shall for all purposes be governed by and interpreted in accordance with the laws of the State of Pennsylvania without regard to any choice of law provision that would result in the application of the laws of any jurisdiction other than the internal laws of the State of Pennsylvania to these Terms and Conditions. The Parties expressly exclude application of the United Nations Convention on Contracts for the International Sale of Goods.

C. ARBITRATION. If a dispute arises related to the purchase and sale of the Products and the Parties have not resolved such dispute through negotiation, the Parties agree to submit the dispute to arbitration. Any arbitration proceeding relating to the Agreement shall be presided over by one arbitrator who shall be agreed to by the Parties, provided that if the Parties are unable to agree on an arbitrator, then each Party shall name one arbitrator and the two arbitrators will together designate a third arbitrator, and the three arbitrators so chosen shall preside over the arbitration proceeding. The arbitration shall be held in Pennsylvania in accordance with the rules of the American Arbitration Association. Arbitration proceedings shall be conducted in the English language. Each Party agrees that the final determination/decision of the arbitrators presiding over the proceeding shall be binding on it. Notwithstanding the foregoing, the Parties may apply to any court of competent jurisdiction for preliminary or interim equitable relief, without breach of this arbitration provision. The prevailing Party in any dispute related hereto, whether in a court of law or in arbitration, shall have its reasonable costs and expenses related to such dispute reimbursed by the non-prevailing Party.

D. SEVERABILITY. If any provision of these Terms and Conditions is held by a court of competent jurisdiction to be unenforceable for any reason, the remaining provisions hereof shall be unaffected and remain in full force and effect.

E. MODIFICATIONS. Neither Party may modify, amend, supplement or otherwise change these Terms and Conditions without the prior written consent of the other Party. Any such future modification, amendment, supplement or other change (a "Change") shall apply only with respect to orders accepted after the effective date of such Change. All waivers must be in writing.

F. ASSIGNMENTS. No right of either Party under these Terms and Conditions shall be assigned or otherwise transferred without the prior express written consent of the other Party, and any attempt to assign or otherwise transfer any rights hereunder, without such consent, shall be void. Subject to the preceding sentence, these Terms and Conditions shall bind the Parties hereto and their permitted successors and assigns.

G. MISCELLANEOUS. These Terms and Conditions are not intended to provide any rights or remedies to any person or entity other than CHIRAL and CUSTOMER and their respective permitted successors and assigns (if any).

H. FORCE MAJEURE. CHIRAL shall not be responsible for any failure to fulfill its obligations hereunder due to causes beyond its reasonable control, including, without limitation, as a result of fire, explosion, earthquake, storm, flood or other weather, unavailability of necessary utilities or raw materials, strike, lockout, unavailability of components, activities of a combination of workmen or other labor difficulties, war, insurrection, riot, act of God or the public enemy, law, act, order, omission, export control regulation, proclamation, decree, regulation, ordinance, or instructions of Government or other public authorities, or judgment or decree of a court of competent jurisdiction. If any such contingency occurs, CHIRAL may elect to either (a) suspend its obligations for the duration of the delaying cause, or (b) extend the time period to complete its obligations by the length of time the contingency endures. In the event of CHIRAL's inability to supply any or all of the Products due to any of the above circumstances, CHIRAL will have the right to allocate its available supply among its CUSTOMERS, or any of them, as CHIRAL, in its sole discretion, elects without liability to CUSTOMER for any failure of performance that may result therefrom. To the extent that no allocation is made to CUSTOMER, either CUSTOMER or CHIRAL will have the right to terminate any affected purchase orders by prompt written notice to the other.

I. CONSTRUCTION AND SURVIVAL. Notwithstanding anything to the contrary contained in herein, these Terms and Conditions shall survive the purchase and sale of the Products hereunder.



CHIRAL TECHNOLOGIES, INC.

800 North Five Points Road
West Chester, PA 19380

Tel: +1-610-594-2100

Fax: +1-610-594-2325

Email: chiral@chiraltech.com

WWW.CHIRALTECH.COM

CHIRALPAK, CHIRALCEL,
and CROWNPAK are registered
trademarks of DAICEL CORPORATION.
© 2017 CHIRAL TECHNOLOGIES, INC.