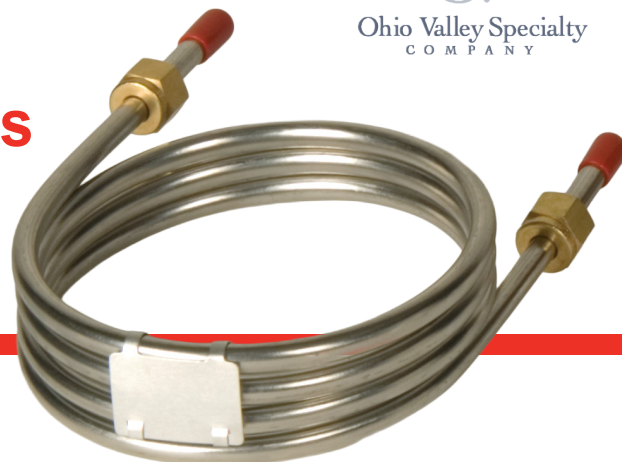


Custom-made Packed Columns

Stainless Steel, Copper, Aluminum, Nickel and PTFE



Our custom-made OV[®]-Packed columns carry a 100% Satisfaction Guarantee!

Orders for custom-made columns will be given immediate attention and most will be shipped within 24 hours from receipt of order. We can supply packed columns made with any combination of support and liquid phase listed in this catalog. We will also make every effort to supply your requirements for other supports or liquid phases.

- Over 42 years experience in packing preparation and column techniques.
- 24 hour delivery.
- Complete with brass Swagelok fittings.
- All stainless steel tubing is our premium grade, manufactured for GC use only.
- Each column packed in individual container. (No lost ferrules or end caps)
- OV's guide to packings and columns included

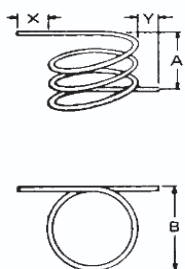


Diagram 1

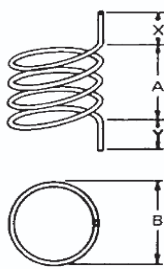


Diagram 2

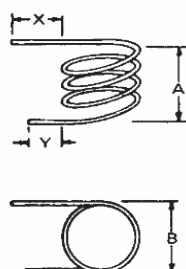


Diagram 3

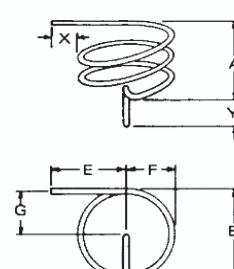


Diagram 4

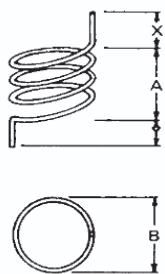


Diagram 5

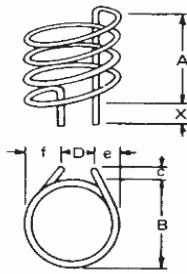


Diagram 6

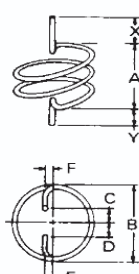


Diagram 7

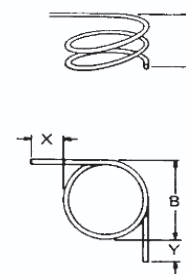


Diagram 8

Request A quote Example:

6'	X	1/8'	Stainless Steel	10%	OV®	Chromosorb W-HP	80/10	for	HP	5890A
↑		↑	↑	↑	↑	↑	↑		↑	↑
Length		O. D.	Tubing Type (Column with Brass Fittings)	Percent Loading	Liquid Phase	Solid Support	Mesh Size		GC Make	GC Model

Request A Quote:

Stainless Steel, Copper, Aluminum, Nickel and PTFE Columns

Complete your information below and fax to (740) 373-9910. We will send you a firm quote.

	X							for	
↑		↑	↑	↑	↑	↑	↑		↑
Length		O. D. 1/8" 3/16" 1/4" 1/16"	Tubing Type Stainless Steel Copper Aluminum Nickel PTFE	Percent Loading	Liquid Phase	Solid Support	Mesh Size		GC Make & Model



SHOP NOW

Visit our website at
afplifesciences.com

Brass Fittings (standard)

Stainless Steel Fittings

Preconditioned

Company

Contact Names

Address

City

State

Zip

Phone

Fax

Email

Stationary Phase

Solvent Code: A = Acetone, C = Chloroform, E = Ethyl Acetate, T = Toluene, M = Methanol

1 Benzene, **2** Butanol, **3** Pentanone, **4** Nitropropane, **5** Pyridine

Catalog Number	Description	Unit	Suggested Substitute	Solvent	McReynold's					°C Min/Max
					1	2	3	4	5	
—	Amine 220*	—	AT-220	C	117	380	181	293	133	0/180
10023	Armeen 2-C*	—		T						0/125
10025	Armeen SD*	—		C						30/100
10017	Apiezon L	25g		C	32	22	15	32	42	20/100
10033	Bentone 34	50g		T,C						20/200
10043	Bis(2-butoxyethyl) Phthalate	20g		M	151	282	227	338	267	20/175
10045	N, N-bis(2-cyanoethyl) formamide	10g		M	690	991	853	1110	1000	20/125
10047	Bis(2-ethylhexyl) Tetrachlorophthalate*	O√-√		C	112	150	123	108	181	0/150
10049	Butane 1,4 diol Succinate	25g			370	571	448	657	611	
10051	Carbowax 400	50g		C	343	653	430			20/100
10053	Carbowax 550	50g		C						20/110
10055	Carbowax 600	50g		C	350	631	428	632	605	20/120
10057	Carbowax 750	50g		C						25/130
10059	Carbowax 1000	50g		M	347	607	418	626	589	40/150
10061	Carbowax 1500	50g		C						40/200
10063	Carbowax 1540	50g		C	371	639	453	666	641	40/200
10065	Carbowax 4000	50g		C	317	545	378	578	521	60/200
10067	Carbowax 6000	50g		C	322	540	369	577	512	60/200
10069	Carbowax 20M	50g		C	322	536	368	572	510	60/250
10071	Carbowax 20M-Terephthalic Acid	50g		C	321	537	367	573	520	60/250
10073	Castorwax*	-O		C	108	265	175	229	246	90/200
10079	Chlorowax 70 (chlorinated paraffin)*	-O		C						/130
10081	Citroflex A-4 (acetyl tributyl citrate)	50g		A	135	268	202	314	233	-25/180
10083	Citroflex 4 (tributyl citrate)	50g		M	135	286	213	324	262	-15/150
10085	Cyanoethylsucrose	50g		A	647	919	797	1043	976	20/125
10093	Dexsil 300	5g		C	47	80	103	148	96	20/450
10094	Dexsil 400	5g		C	59	114	140	187	173	20/450
10095	Dexsil 410	5g		C	85	165	169	242	180	20/450
10099	Dibutyl Phthalate	50g		M						-20/100
10101	Didecyl Phthalate	25g		A	136	255	213	320	235	20/150
10103	Diethylene Glycol Adipate	25g		A	378	603	460	665	658	20/190
10105	Diethylene Glycol Succinate	25g	DEGS-GC	A	496	746	590	837	835	20/200
10107	Di(2-ethylhexyl) Phthalate*	—		M	135	254	213	320	235	20/150
10109	Di(2-ethylhexyl) Sebacate	50g		A	72	168	108	180	125	-20/125
10111	Diglycerol	10g		M	371	826	560	676	854	20/120
10113	Diisodecyl Adipate	50g		M	71	171	113	185	128	-20/125
10115	Diisodecyl Phthalate	50g		A	84	173	137	218	155	-20/150
10117	Diisooctyl Phthalate*	—		M,A	94	193	154	243	202	0/175
10119	Diisopropyl Phthalate*	—		M						0/100
10121	Dilauryl Phthalate	10g		M	79	158	120	192	158	20/150
10123	Dimer Acid*	—		C						30/100
10127	Dimethylformamide	50g		M						-20/20
10129	Dimethylsulfolane	—		M						20/50

Catalog Number	Description	Unit	Suggested Substitute	Solvent	McReynold's					°C Min/Max
					1	2	3	4	5	
10133	Dinonyl Phthalate	50g		A	83	183	147	231	159	20/150
10135	Diocetyl Phthalate*	—		A	92	186	150	230	167	-20/100
10137	Diphenylformamide*	—		M						75/100
10140	EGSS-X	10g		C	484	710	585	831	778	90/225
10141	EPON 1001 (epoxy resin)	50g		C	284	489	406	539	601	65/200
10143	Ethofat 60/25	50g		C	191	382	244	380	333	50/125
10145	Ethylene Glycol Adipate	50g	Hi-Eff 2AP	C	372	577	455	658	619	100/200
10149	Ethylene Glycol Phthalate*	—		C	453	697	602	816	872	
10151	Ethylene Glycol Sebacate*	—		C						100/200
10155	Ethylene Glycol Succinate	25g	Hi-Eff-2BP	C	537	787	643	903	889	100/200
10156	FFAP	25g	OV-351	C	340	580	397	602	627	00/275
10159	Formamide	50g		M						20/50
10161	Glycerol	50g		M						20/100
10163	Halocarbon Oil 14-25	50g		C						20/150
10165	Hallcomid M-18*	—		A	79	268	130	222	146	40/150
10166	Hallcomid M-18 OL	50g		M,C	89	280	143	239	165	8/150
10171	Hexamethylphosphoramide (HMPA)	50g		M						20/35
10401	Hi-EFF-1AP	25g		C	378	603	460	665	658	20/210
10402	Hi-EFF-2AP	25g		C	372	576	453	655	617	100/210
10405	Hi-EFF-8BP*	—		C	271	444	330	498	463	100/250
10407	Hi-EFF-1BP	25g		C	499	751	593	840		20/200
10408	Hi-EFF-2BP	25g		C	537	787	643	903	889	100/200
10175	Igepal CO-630	50g		M	192	381	253	382	344	100/200
10179	Igepal CO-880	50g		C	259	461	311	482	426	100/200
10181	Igepal CO-990	50g		C	298	508	345	540	475	100/220
10183	B,B,-Iminodipropionitrile	25g		M						1100
10185	JXR*	—	OV-1	C	15	53	45	64	41	20/300
10187	Kel-F Oil No. 3*	—		A						0/50
10189	Kel-F Oil No. 10	50g		A						20/100
—	Kel-F Wax (Discontinued)*	—		A	55	67	114	143	116	20/220
10201	Lexan (polycarbonate resin)	25g		C						220/270
10203	Mannitol	25g								170/200
10205	Neopentyl Glycol Adipate	25g		C	234	425	312	402	438	50/225
10207	Neopentyl Glycol Sebacate*	—		C	172	327	225	344	326	50/225
10209	Neopentyl Glycol Succinate	10g		C	272	469	366	539	474	50/225
10211	Nujol (paraffin oil)	50g		T	9	5	2	6	11	0/100
10213	Oronite Polybutene 32*	—		C						50/200
10214	Oronite Polybutene 128*	—		C						50/200
10221	B,B,-Oxydipropionitrile	25g		M						20/100
10225	Phenyldiethanolamine	25g		A						00/150
10420	Poly-A-101A*	—		C	115	357	151	262	214	50/275
10421	Poly-A-103	10g		C	115	331	149	263	214	70/275
10423	Poly-I-110	10g		C	115	194	122	204	202	90/275
10424	Poly-S-176	3g		C						150/400
10425	Poly-S-179	3g		C						200/400
10233	Polyphenyl Ether (5 rings) OS-124	25g		C	176	227	224	306	283	20/200
10235	Polyphenyl Ether (6 rings)*			C	182	233	228	313	293	0/250
10237	Polypropylene Glycol	50g		M	128	294	173	264	226	0/150

Catalog Number	Description	Unit	Suggested Substitutue	Solvent	McReynold's					°C Min/Max
					1	2	3	4	5	
10241	Polyvinylpyrrolidinone (PVP)	50g		M						20/200
10243	Propylene Glycol	50g		C						0/50
10244	Sebaconitrile	20g		C						0/150
—	Silicone AN-600*	—	OV-225	A						20/300
1011	Silicone DC-11	50g	OV-101	C	17	86	48	69	56	20/300
1010	Silicone DC-200, 350cstk	50g	OV-101	C	16	57	45	66	43	20/200
1013	Silicone DC-410	50g		C	18	57	47	68	44	20/300
1014	Silicone DC-401	50g								
1015	Silicone DC-550	50g	OV-7	C	81	124	124	189	145	20/225
1017	Silicone DC-704	50g		A						20/250
1018	Silicone DC-710	50g		A	107	149	153	228	90	20/225
1019	Silicone DC-HiVac Grease	50g								
1021	Silicone DC-QF-1	50g	OV-210	A	144	233	355	463	305	20/250
1022	Silicone DC-FS-1265	50g	OV-210	A	144	233	355	463	305	20/225
1023	Silicone GE-SE-30	50g	OV-1	C	15	53	44	64	41	50/300
1024	Silicone GE-SE-30 GC Grade	10g	OV-1	C	15	53	44	64	41	50/350
1025	Silicone GE-SE-52	50g	OV-73	C	32	72	65	98	67	50/300
1026	Silicone GE-SE-54	50g	OV-73	C	33	72	66	99	67	100/300
1027	Silicone GE-SF-96	50g	OV-101	C	12	53	42	61	37	20/250
1029	Silicone GE-XE-60	10g	OV-225	A	204	381	340	493	367	20/250
1031	Silicone GE-XF-1150	25g								20/250
OV-LIQUID PHASES - MANUFACTURED SPECIFICALLY FOR GC USE										
1041	Silicone OV-1	10g		T	16	55	44	65	42	100/350
1042	Silicone OV-3	25g		A	44	86	81	124	88	20/350
1043	Silicone OV-7	25g		A	69	113	111	171	128	20/350
1044	Silicone OV-11	25g		A	102	142	145	219	178	0/350
1045	Silicone OV-17	25g		A	119	158	162	243	202	20/350
1046	Silicone OV-22	10g		A	160	188	191	283	253	20/350
1047	Silicone OV-25	10g		A	178	204	208	305	280	20/350
1048	Silicone OV-61	10g		A	101	143	142	213	174	20/350
1049	Silicone OV-73	10g		T	40	86	76	114	85	20/350
1050	Silicone OV-101	20g		T	17	57	45	67	43	20/350
1051	Silicone OV-105	10g		A	36	108	93	139	86	20/250
1052	Silicone OV-202	10g		C	146	238	358	468	310	0/275
1053	Silicone OV-210	25g		C	146	238	358	468	310	20/275
1057	Silicone OV-215	10g		E	149	240	363	478	315	20/275
1054	Silicone OV-225	10g		A	228	369	338	492	386	20/250
1055	Silicone OV-275	5g		A	629	872	763	1106	849	20/275
1056	Silicone OV-330	5g		A	222	391	273	417	368	30/250
1058	OV-351 (Replaces FFAP)	10g		C	335	552	382	583	540	50/250
1059	Silicone OV-1701	3g		A	67	170	153	228	171	20/325
1083	Silicone Silar 5CP	5g		C	319	495	446	637	531	50/275
1084	Silicone Silar 7CP	5g		C	440	638	605	844	673	50/275
1085	Silicone Silar 9CP	5g		C	489	725	631	910	778	50/275
1086	Silicone Silar 10C	5g		C	523	757	659	942	801	50/275
—	SP-2100*	—	OV-101	T	17	57	45	67	43	20/350
—	SP-2250*	—	OV-17	A	119	158	162	243	202	20/350
—	SP-2401*	—	OV-202	C	146	238	358	468	310	0/275
—	SP-1000*	—	OV-351	C	332	555	393	583	546	50/250

Catalog Number	Description	Unit	Suggested Substitutue	Solvent	McReynold's					°C Min/Max
					1	2	3	4	5	
–	SP-2310*	–	Silar 7CP	A	440	637	605	840	670	50/275
–	SP-2330*	–	Silar 9CP	A	490	725	630	913	778	50/275
–	SP-2340*	–	Silar 10C	A	520	757	659	942	800	50/275
1032	Silicone UCC L-45	50g	OV-1							
1033	Silicone UCC W-98	50g	OV-1							0/300
10323	Span 80 (sorbitan monooleate)	25g		T	97	266	170	216	268	20/150
10325	Squalane	50g		T	0	0	0	0	0	20/150
10327	Squalene	50g		T	152	341	238	329	344	20/150
10329	Sucrose Acetate Isobutyrate (SAIB)	25g		C	172	330	251	378	295	30/200
Catalog Number	Description	Unit	Suggested Substitutue	Solvent	McReynold's					°C Min/Max
					1	2	3	4	5	
10347	THEED	25g		M	463	942	626	801	893	20/125
10353	Tricresyl Phosphate	50g		M	176	321	250	374	299	20/125
10355	Triethanolamine	50g		M						25/75
10357	Trimer Acid*	–		M	94	271	163	182	378	20/200
10359	1,2,3-Tris(2-cyanoethoxy)propane (TCEP)	50g		M	594	857	759	1031	917	29/150
10361	Tris(tetrahydrofurfuryl)Phosphate*	–		A						20/125
10363	Triton X-100	50g		A	203	399	268	402	362	20/190
10365	Triton X-305	50g		A	262	467	314	488	430	20/250
10367	Tween 80	50g		M	227	430	283	438	396	20/160
10373	UCON LB-550-X	50g		M	118	271	158	243	206	20/200
10381	UCON 50-HB-280-X	50g		M	177	362	227	351	302	20/200
10383	UCON 50-HB-2000	50g		A	202	394	253	392	341	20/200
10385	UCON 50-HB-5100	50g		M	214	418	278	421	375	20/200
10389	Versamid 900	50g								190/275

Porous Polymers

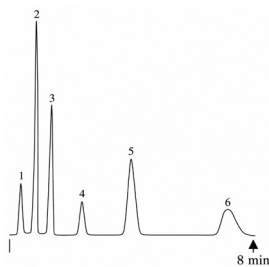


Porapak	Catalog Number			Weight
	50/80	80/100	100/120	
P	8501	8611	8721	20 grams
P-S	8502	8612	8722	20 grams
Q	8503	8613	8723	26 grams
Q-S	8504	8614	8724	26 grams
R	8505	8615	8725	24 grams
S	8506	8616	8726	26 grams
N	8507	8617	8727	29 grams
T	8508	8618	8728	31 grams

Freon® Gas

Column: 1.84 m x 2 mm ID, 150°C
Support: PORAPAK® Q 80-100 mesh
Carrier: 25 ml/min Helium
Detector: TC, 350°C

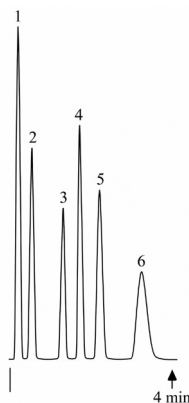
1. Air
2. Water
3. FREON® 12 gas
4. FREON® 114 gas
5. FREON® 11 gas
6. FREON® 113 gas



Gases

Column: 1.0 m x 2.3 mm ID 50°C
Support: PORAPAK® N 80-100 mesh
Carrier: 25 ml/min Helium
Detector: TC, 200°C

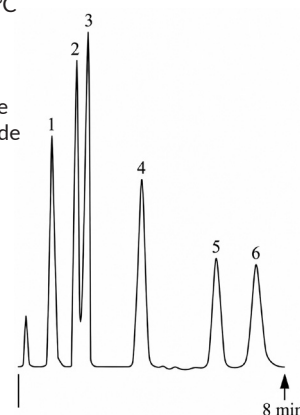
1. Air
2. Methane
3. CO2
4. Ethylene
5. Ethane
6. Acetylene



Aldehydes

Column: 1.84 m x 2.3 mm SS 175°C
Support: PORAPAK® T 80-100 mesh
Carrier: 25 ml/min Helium
Detector: TC, 350°C

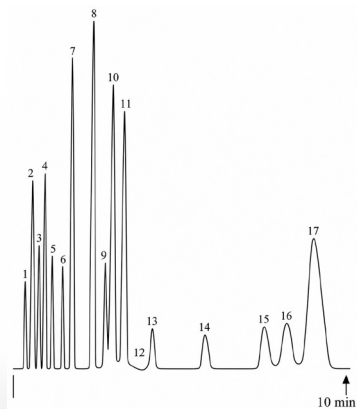
1. Formaldehyde
2. Water
3. Acetaldehyde
4. Propionaldehyde
5. iso-Butyraldehyde
6. Butyraldehyde



C1-C5 Hydrocarbons

Injector: 150°C
Column: 1.5 m x 2.3 mm ID, 25°C
Support: DURAPAK®
n-Octane/PORASIL® C, 80-100 mesh
Carrier: N2 25 ml/min
Detector: FID, 200°C

1. Methane
2. Ethane and Ethylene
3. Acetylene
4. Propane
5. Propylene
6. iso-Butane
7. n-Butane
8. Butene-1
9. iso-Butylene
10. trans-Butene-2
11. cis-Butene-2
12. iso-Pentane
13. n-Pentane
14. Pentene-1
15. trans-Pentene-2
16. cis-Pentene-2
17. 2-Methyl Pentane



Bonded Porous-Sil™ (75cc) formerly known as Durapak®

Catalog No.	Description	Mesh Size	MAX Temp
8550	Carbowax 400/Porous-Sil C	80/100	200°C
8551	N-Octane/Porous-Sil C	80/100	175°C
8552	OPN/Porous-Sil C	80/100	150°C
—	C-18/Porous-Sil C (Disc.)	100/150	200°C
8554	Phenylisocyanate/Porous-Sil C	80/100	60°C

Porous-Sil™ (20gm) formerly known as Porasil

Porous-Sil	Catalog Number	
	80/100	100/150
B	8802	8812
C	8803	8813

A Note on Porous-Sil™

All Porasil Porous polymer products have been discontinued by The Waters Corporation. Ohio Valley now offers an identical product to the Porasil line.

Porous Polymers

Haysep® (75cc)

Catalog No.	Description	Mesh Size	MAx Temp
H8501	P	60/80	
H8611	P	80/100	250°C
H8721	P	100/120	
H8503	Q	60/80	
H8613	Q	80/100	275°C
H8723	Q	100/120	
H8505	R	60/80	
H8615	R	80/100	250°C
H8725	R	100/120	
H8506	S	60/80	
H8616	S	80/100	250°C
H8726	S	100/120	
H8507	N	60/80	
H8617	N	80/100	165°C
H8727	N	100/120	
H8508	T	60/80	
H8618	T	80/100	165°C
H8728	T	100/120	
H8001	A	60/80	
H8002	A	80/100	165°C
H8003	A	100/120	
H8004	B	60/80	
H8005	B	80/100	190°C
H8006	B	100/120	
H8007	C	60/80	
H8008	C	80/100	250°C
H8009	C	100/120	
H8010	D	60/80	
H8011	D	80/100	290°C
H8012	D	100/120	
H8013	DB	60/80	
H8014	DB	80/100	300°C
H8015	DB	100/120	

Tenax® (15 grams)

Based on 2, 6-diphenyl-p-phenylene oxide, Tenax is suitable for the separation of high boiling compounds such as alcohols, diols, polyethylene glycol compounds, phenols, mono and diamines, ethanolamines, amides, aldehydes, and ketones. MaOT: 350°C

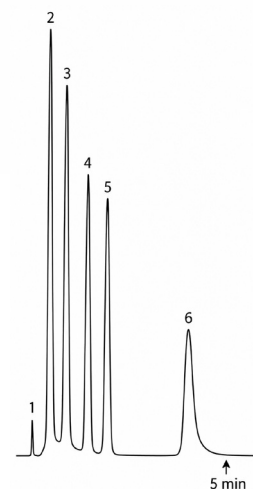
Catalog No.	Description
8650	Tenax 35/60
8651	Tenax 360/80
8652	Tenax 80/100

Mesh Size	Catalog No.							
	101	102	103	104	105	106	107	108
60/80	17424	27403	37434	Discontinued	57454	67457	77460	87463
80/100	17425	27404	37435	Discontinued	57455	67458	77461	87464
100/120	17426	27405	37436	Discontinued	57456	67459	77462	87465

Amines

Column: 5' x 1/8" SS packed with HayeSep® B 80/100 mesh
 Column Temp: 140° up to 190°C at 16°C/min
 Injector Temp: 150°C
 Detector: PE. 90 D.C. 175 ma, Att. x 8 180°C
 Flow: He 30 cc/min
 Sample 0.2 microliters with on-column injection

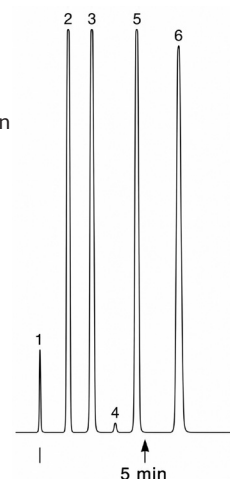
1. Air
2. Water
3. Methylamine
4. Dimethylamine
5. Trimethylamine
6. Ethylene diamine



Solvents

Column: 8' x 1/8" SS packed with HayeSep® P 60/80 mesh
 Column Temp: 80° up to 180°C at 16°C/min
 Injector Temp: 150°C
 Manifold Temp: 180°C
 Detector: 175 ma 200°C
 Flow: He 30 cc/min
 Sample: 0.2 microliters with on-column injection

1. Air
2. Water
3. Methanol
4. Ethanol
5. Acetone
6. Chloroform



Solid Supports

Abbreviations:

AW = Acid Washed **HP** = High Performance **DMCS** = Dimethyldichlorosilane **Chromosorb W** (150 grams)

Chromosorb W (150 grams)

Mesh Size	Catalog Number			
	NON-AW	AW	AW-DMCS	HP
60/80	7701	7723	7733	7743
80/100	7702	7724	7734	7744
100/120	7703	7725	7735	7745

Chromosorb G (225 grams)

Mesh Size	Catalog Number			
	NON-AW	AW	AW-DMCS	HP
60/80	7801	7823	7833	7843
80/100	7802	7824	7834	7844
100/120	7803	7825	7835	7845

Chromosorb P (454 grams)

Mesh Size	Catalog Number		
	NON-AW	AW	AW-DMCS
60/80	7923	7933	7943
80/100	7924	7934	7944
100/120	7925	7935	7945

Chromosorb T (225 grams)

Mesh Size	Catalog Number
30/60	7523
40/60	7524

Chromosorb 750 (100 grams)

Mesh Size	Catalog Number
60/80	7623
80/100	7624
100/120	7625

Molecular Sieves (100 grams)

Description	Catalog Number
MOLECULAR SIEVE 4A	
40/60 mesh	5320
60/80 mesh	5323
80/100 mesh	5326
100/120 mesh	5330
MOLECULAR SIEVE 5A	
40/60 mesh	5333
60/80 mesh	5336
80/100 mesh	5339
100/120 mesh	5442
MOLECULAR SIEVE 13X	
40/60 mesh	5445
60/80 mesh	5448
80/100 mesh	5451
100/120 mesh	5454
ACTIVATED ALUMINA (Alcoa Type F-1)	
40/60 mesh	5467
60/80 mesh	5460
80/100 mesh	5463
100/120 mesh	5466
SILICA GEL (Davison Grade 12)	
40/60 mesh	5457
60/80 mesh	5472
80/100 mesh	5475
100/120 mesh	5478

