

# Choosing Columns

## By ASTM

ASTM Method			
Method	Description	Vertical® Recommend	Page
D 1945	Natural gas	VertiBond™ MoLSieve, 30m x 0.53mm df = 50µm	169
		VertiBond™ Q, 15m x 0.53mm df = 40µm	170
D 1946	Reformed gas	VertiBond™ MoLSieve, 30m x 0.53mm df = 50µm	169
D 1983	FAME analysis	VertiBond™ Silar90, 30m x 0.25mm df = 0.2µm	168
D 2163	Liquified petroleum gases and propylene concentrations	VertiBond™ Alumina, 50m x 0.53mm df = 10µm	171
D 2245	Oils and oil acids in solvent-reducible paints	VertiBond™ Silar90, 30m x 0.25mm df = 0.2µm	168
D 2306	Xylene isomers	VertiBond™ WAX, 60m x 0.32mm df = 0.5µm	164
D 2426	Butadiene and styrene in butadiene concentrates	VertiBond™ 1, 30m x 0.53mm df = 1.5µm	137
D 2427	C2-C5 hydrocarbons in gasolines	VertiBond™ Alumina, 50m x 0.53mm df = 10µm	171
D 2456	Polyhydric alcohols in alkyd resins	VertiBond™ WAX, 30m x 0.53mm df = 1.0µm	164
D 2504	Non-condensable gases in C1-C3 hydrocarbons	VertiBond™ MoLSieve, 30m x 0.53mm df = 50µm	169
D 2580	Phenols in water	VertiBond™ 5ms, 25m x 0.32mm df = 0.5µm	146
		VertiBond™ AqWAX, 25m x 0.53mm df = 1.0µm	166
D 2593	Butadiene purity and hydrocarbon impurity	VertiBond™ Alumina, 50m x 0.53mm df = 10µm	171
D 2600	Aromatic traces in light saturated hydrocarbons	VertiBond™ WAX, 25m x 0.32mm df = 1.2µm	163
D 2743	Oil and oil acids	VertiBond™ Silar90, 30m x 0.25mm df = 0.2µm	168
D 2800	FAME analysis	VertiBond™ Silar90, 50m x 0.25mm df = 0.2µm	168
D 2804	Purity of methyl ethyl ketone	VertiBond™ WAX, 30m x 0.32mm df = 0.5µm	164
		VertiBond™ WAX, 30m x 0.53mm df = 1.0µm	164
D 2908	Volatile organics in water	VertiBond™ 624, 30m x 0.32mm df = 1.8µm	158
		VertiBond™ WAX, 30m x 0.32mm df = 0.5µm	164
		VertiBond™ WAX, 30m x 0.53mm df = 1.0µm	164
		VertiBond™ WAX, 30m x 0.53mm df = 1.0µm	164
D 2998	Polyhydric alcohols in alkyd resins	VertiBond™ 1, 30m x 0.32mm df = 1.0µm	137
D 2999	Monopentaerythritol in commercial pentaerythritol	VertiBond™ 1, 30m x 0.53mm df = 1.5µm	137
D 3009	Composition of turpentine	VertiBond™ WAX, 30m x 0.32mm df = 0.5µm	164
		VertiBond™ WAX, 30m x 0.53mm df = 1.0µm	164
D 3086	Organochlorine pesticides in water	VertiBond™ 5, 50m x 0.25mm df = 0.12µm	143
D 3168	Polymers in emulsion paints	VertiBond™ 1, 30m x 0.32mm df = 1.0µm	137
		VertiBond™ 1, 30m x 0.53mm df = 1.5µm	137
D 3271	Solvent analysis in paints	VertiBond™ Q, 30m x 0.53mm df = 20µm	170
		VertiBond™ WAX, 30m x 0.53mm df = 1.0µm	164
D 3304	PCBs in environmental materials	VertiBond™ 5, 50m x 0.25mm df = 0.1µm	143
D 3328	Comparison of waterborne petroleum oils	VertiBond™ 1, 30m x 0.32mm df = 3.0µm	137
		VertiBond™ 1, 30m x 0.53mm df = 3.0µm	137
D 3329	Purity of methyl isobutyl ketone	VertiBond™ WAX, 60m x 0.53mm df = 1.0µm	164
D 3416	Total hydrocarbons, methane, and CO in air	VertiBond™ Q, 30m x 0.53mm df = 20µm	170
		VertiBond™ MoLSieve, 30m x 0.53mm df = 50µm	169
D 3432	Toluene diisocyanates in urethane prepolymers	VertiBond™ 1, 30m x 0.32mm df = 1.0µm	137
		VertiBond™ 1, 30m x 0.53mm df = 1.5µm	137
D 3447	Purity of trichlorotrifluoroethane (CFC-113)	VertiBond™ 1, 50m x 0.53mm df = 5.0µm	137
D 3452	Identification of rubber	VertiBond™ 1, 30m x 0.53mm df = 1.5µm	137
D 3457	FAME analysis	VertiBond™ Silar90, 30m x 0.25mm df = 0.2µm	168
D 3465	Purity of monomeric plasticizers	VertiBond™ 1, 25m x 0.32mm df = 0.5µm	137
		VertiBond™ 1, 30m x 0.53mm df = 1.5µm	137

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D 3534	PCBs in water	VertiBond™ 5, 50m x 0.25mm df = 0.25µm	143
D 3606	Benzene and toluene in gasoline	VertiBond™ 1ms, 15m x 0.25mm df = 0.1µm	136
D 3687	Volatile organic compounds	VertiBond™ WAX, 30m x 0.32mm df = 0.5µm	164
		VertiBond™ WAX, 30m x 0.53mm df = 1.0µm	164
D 3725	Fatty acids in drying oils	VertiBond™ AqWAX, 25m x 0.53mm df = 1.0µm	166
D 3760	Analysis of cumene	VertiBond™ WAX, 50m x 0.53mm	164
D 3797	Analysis of o-xylene	VertiBond™ WAX, 50m x 0.53mm	166
D 3798	Analysis of p-xylene impurities	VertiBond™ WAX, 50m x 0.53mm	166
D 3876	Methoxyl and hydroxypropyl substitution in cellulose ether products	VertiBond™ 1, 30m x 0.32mm df = 1.0µm	137
		VertiBond™ 1, 30m x 0.53mm df = 1.5µm	137
D 3962	Impurities in styrene	VertiBond™ AqWAX, 25m x 0.53mm df = 1.0µm	166
D 4059	PCBs in insulating liquids	VertiBond™ 5, 50m x 0.25mm df = 0.25µm	143
D 4275	Butylated hydroxy toluene in ethylene and ethylenevinylacetate polymeres	VertiBond™ 1, 30m x 0.32mm df = 3.0µm	137
		VertiBond™ 1, 30m x 0.53mm df = 3.0µm	137
D 4367	Benzene in hydrocarbon solvent	VertiBond™ 1ms, 15m x 0.25mm df = 0.1µm	136
D 4384	Acrylonitrile monomer (residual)	VertiBond™ Q, 25m x 0.53mm df = 20µm	170
D 4420	Aromatics in gasoline	VertiBond™ 1ms, 15m x 0.25mm df = 0.1µm	136
D 4424	Butylene analysis	VertiBond™ Alumina, 30m x 0.53mm df = 10µm	171
D 4735	Thiophene impurities in benzene	VertiBond™ AqWAX, 25m x 0.53mm df = 1.0µm	166
D 4768	Phenol and cresol inhibitors in insulating oils	VertiBond™ AqWAX, 25m x 0.53mm df = 1.0µm	166
D 5060	Impurities in ethylbenzene	VertiBond™ WAX, 60m x 0.32mm df = 0.5µm	164
D 5135	Analysis of styrene	VertiBond™ WAX, 60m x 0.32mm df = 0.5µm	164
D 5580	Aromatics in finished gasoline	VertiBond™ 1ms, 15m x 0.25mm	136
E 0202	Analysis of glycols	VertiBond™ WAX, 25m x 0.25mm df = 0.2µm	163
E 1100	Analysis of denaturated ethanol	VertiBond™ WAX, 25m x 0.53mm df = 0.5µm	163

