## VertiFlash<sup>™</sup> Alumina

- Ultra-pure to guarantee uniformity and reproducibility
- Minimal fines With no impediments to flow, separations occur quickly with no loss of chromatographic performance.
- Wide range of mesh sizes allows for excellent flow rates.
- Narrow particle size distribution eliminates any guesswork in scaling separation.

VertiFlash<sup>™</sup> Alumina is good for isolation and purification of many kinds of polar compounds like alkaloids, antiobiotics, glycosides, enzymes, plant extracts and etc. There are 3 kinds of surface modifications available; "A" (Acid), "B" (Basic), and "N" (Neutral).

Alumina PCB is a chemically and physically modified Alumina for the analysis and removal of PCB's. This material will find wide use and application in/for Environmental Clean-Up, Solvent Purification, Electric Utilities: Transformer Oil, Soil, Water Studies

Alumina Pyrogen is used specifically for removal of pyrogens in solution. Pyrogens are typically complex carbohydrates which preferentially adsorb to Alumina Pyrogen. Ideal for antibiotic production and other types of bio-technology products, natural product extraction, purification & de-colorization, heavy metal removal, clean-up, and more.

Alumina Biomass is used for removing biomass in nutraceutical or natural product purification.

Alumina Process is used for process scale removal of impurities. Its high macroporosity improves diffusion rates and the high surface area provides enhanced capacity.

Alumina Decolor is good for removal of color, dyes and clean-up of water.

Alumina Dioxin is developed to meet the high recovery level required for the analysis of polychlorinated dibenzodioxins and dibenzofurans according to VDI-Regulation 3499, part I.



drying matter Density area	Specifications					
Alumina B   10   < 1	Alumina	pН	drying	matter		Surface area (m²/g)
Alumina N   7.5   < 1   < 0.1   0.8   200     Alumina PCB   < 1	Alumina A	4.75	< 1.3	< 0.1	0.8	200
Alumina PCB < 1	Alumina B	10	< 1	< 0.1	0.8	200
Alumina Pyrogen   < 1   < 0.1   0.8   200     Alumina Biomass   < 1	Alumina N	7.5	< 1	< 0.1	0.8	200
Alumina Biomass   < 1   < 0.1   0.8   200     Alumina Process   < 1	Alumina PCB		< 1	< 0.1	0.8	200
Alumina Process   < 1   < 0.1   0.8   200     Alumina Decolor   < 1	Alumina Pyrogen		< 1	< 0.1	0.8	200
Alumina Decolor   < 1   < 0.1   0.8   200	Alumina Biomass		< 1	< 0.1	0.8	200
	Alumina Process		< 1	< 0.1	0.8	200
Alumina Dioxin < 1 < 0.1 0.8 200	Alumina Decolor		< 1	< 0.1	0.8	200
	Alumina Dioxin		< 1	< 0.1	0.8	200

Ordering Inform							
Pore size (A)	Particle Size (µm)	QTY (kg)	Part No.				
VertiFlash™ Alumina A							
90	50-200	1	1002-2401				
		5	1002-2405				
		50	1002-2450				
VertiFlash™ Alumina B							
90	50-200	1	1003-2401				
		5	1003-2405				
		50	1003-2450				
VertiFlash™ Alumina N							
90	50-200	1	1004-2401				
		5	1004-2405				
		50	1004-2450				
VertiFlash™ Alumina PCB							
90	50-200	1	1005-2401				
		5	1005-2405				
		50	1005-2450				
VertiFlash™ Alumina Pyrogen							
90	50-200	1	1006-2401				
		5	1006-2405				
		50	1006-2450				
VertiFlash™ Alumina Biomass							
90	50-200	1	1007-2401				
		5	1007-2405				
		50	1007-2450				
VertiFlash™ Alumina Process							
90	150-600	1	1008-2401				
		5	1008-2405				
		25	1008-2425				
VertiFlash™ Alumina Decolor							
90	30-200	1	1009-2401				
		5	1009-2405				
		25	1009-2425				
		50	1009-2450				
VertiFlash™ Alumina Dioxin							
90	50-200	1	1010-2401				
		5	1010-2405				
		25	1010-2425				