

OPUS® ValiChrom™ for process validation



OPUS® ValiChrom™ Columns are glass pre-packed columns that are exact scaled-down models of full-scale columns.

Ideal for process validation, including viral clearance, OPUS® ValiChrom™ Columns are high-performance pre-packed glass columns individually flow-packed according to validated packing protocols with the precision of 1 mm bed height. They uniquely combine features specifically designed for validation studies with pre-packed convenience and flexibility.

- **Convenient**, pre-packed, ready-to-use
- **Flexible**, packed with user-specified process resin
- **Matched** diameter, bed height, and compression with full-scale process column
- **Proven**, with 10,000+ columns packed
- **Reproducible**, controlled bed height ensures replicate columns with similar characteristics
- **Cost-effective**, small diameter minimizes costly sample volume and viral spike volumes
- **Certified** with a Certificate of Analysis
- **Expertly packed** in an ISO 9001:2015 certified facility



Applications

- Virus clearance studies
- Functional scale down modeling (scale down validation)
- Resin lifetime evaluation
- Resin lot-to-lot validation
- CIP method validation
- Process robustness studies

	0.50 cm	0.66 cm	0.80 cm	1.00 cm	1.13 cm	1.60 cm	2.50 cm
Column inner diameter	0.50 cm	0.66 cm	0.80 cm	1.00 cm	1.13 cm	1.60 cm	2.50 cm
Packed bed height	10 - 60 cm customized						
Column volume range*	2-12 mL	3 - 20 mL	5 - 30 mL	8 - 45 mL	10 - 60 mL	20 - 120 mL	50-300 mL
Inner cross-sectional area	0.2 cm ²	0.34 cm ²	0.5 cm ²	0.79 cm ²	1.0 cm ²	2.0 cm ²	5.0 cm ²
Connectors	1/16" female (10 - 32)				M6 female		
Chemical stability	All commonly used aqueous buffers, pH 1 - 14, organic solvents**. Avoid the use of halogenated organic solvents, hexane						
Column storage solution	AIEC and CIEC Columns: 20 % ethanol + 150 mM sodium chloride HIC, SEC, Affinity and MMC Columns: 20 % ethanol CHT, CFT Columns (Bio-Rad): 20 % ethanol + 10 mM sodium phosphate, pH 6.8 ProSep® Columns(Millipore):1 % benzyl alcohol + 0.1 M sodium acetate, pH 5.1						
Recommended storage temperature	AIEC, CIEC, HIC, SEC and MMC: +4° C - +30° C Affinity Columns: +2° C - +8° C						
Working temperature	+4° C - +30° C						
Maximum working pressure	Up to 30 bar						
Materials of construction	Outer tube: PMMA, Inner tube: Bore silica glass, Frit: Freudenberg PE/PP 7 - 12 µm pore size						

* The actual column volume of the packed bed is specified by the selected bed height. Customized bed heights < 10 cm are available upon request.

** The chemical stability of the packed chromatography resin also has to be taken into consideration. For more information, please refer to the manufacturer's resin specification.