

# Specialty SPE

## VertiPak™ PSA/Carbograph

- VertiPak™ PSA/Carbograph SPE is double-layer SPE tube that contains both VertiPak™ Carbograph (upper layer) and VertiPak™ PSA (lower layer) sorbents that separated by PE frit.
- Specially used for multi-residue pesticides in foods e.g. fruits, vegetables.
- VertiPak™ PSA is a weak anion exchanger that has 2 amine groups offering higher ionic capacity than NH<sub>2</sub> for removing of fatty acids, organic acids, organic pigments and sugars.
- VertiPak™ Carbograph is non-porous graphitized carbon black. Its surface contains oxygen complexes forming positively charged chemical heterogeneities on surface offering rapid primary reversed-phase interaction for multi-residue pesticides.
- Tube format is available in 7 tube sizes.
- Tubes are packaged in zip sealing bag protective from moisture and light.
- Includes a Performance report including the QC results, lot chromatogram and lot recovery test.

PSA Specifications	
Phase	PSA (Ethylenediamine-N-propyl)
Base	Irregular-shaped Silica
Particle Size (µm)	45-65
Pore Size (Å)	60-80
Surface Area (m <sup>2</sup> /g)	450-550
Carbon Load (%)	7
Endcap	No
pH Stability	2-9

Carbograph Specifications	
Base	Non-Porous Graphitized Carbon
Particle Size (µm)	35-120
Pore Size (Å)	-
Surface Area (m <sup>2</sup> /g)	100-120
Carbon Load (%)	-
Endcap	No
pH Stability	-

VertiPak™ PSA/Carbograph Tubes			
Bed Weight	Tube Size	QTY	Part No.
25/25mg	1mL	100	0135-0236
25/25mg	3mL	50	0135-0245
50/50mg	1mL	100	0135-0336
50/50mg	3mL	50	0135-0345
50/50mg	10mL	30	0135-0364
100/100mg	3mL	50	0135-0445
100/100mg	10mL	30	0135-0464
250/250mg	3mL	50	0135-0645
250/250mg	6mL	30	0135-0654
250/250mg	10mL	30	0135-0664
500/500mg	6mL	30	0135-0954
500/500mg	12mL	30	0135-0974
1,000/1,000mg	12mL	30	0135-1074
2,500/2,500mg	35mL	20	0135-1282
5,000/5,000mg	60mL	16	0135-1391



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