

Anasorb 727

Sorbent for Sampling Reactive and Polar Organic Compounds



Description

Anasorb 727 is derived from cross-linked styrene and similar monomers. Sorbent properties are similar to Chromosorb® 106. The surface area is large, very unreactive, and extremely hydrophobic. This sorbent was examined as a candidate for sampling reactive and polar organic compounds. Breakthrough studies show safe sample volumes in the range of 1 to 15 liters for a wide range of compounds with boiling points between 50 and 200 C. Experiments on breakthrough volume, desorption efficiency, and storage stability show that relative humidity has no effect on either polar or non-polar compounds.

In 1995 a European project¹ concluded that Anasorb 727 (Comparable to Chromosorb 106) is the best all-purpose sorbent for collecting industrial hygiene samples coupled with analysis by thermal desorption and gas chromatography.

Applications for Anasorb 727

Chemical Sampled	Sampling Method	Anasorb 727 amount	Product Description	Cat. No.
alpha/beta-Pinene	Swedish NIOH Validation ²	300 mg	Passive Sampler	575-003
alpha-Methyl styrene	SKC Validation ³	300 mg	Passive Sampler	575-003
delta-3-Carene	Swedish NIOH Validation ²	150/300 mg	Sorbent Tube, 8-mm OD x 110-mm L	226-75
o-Chlorostyrene	SKC Validation ³	300 mg	Passive Sampler	575-003
Cyclohexanone	SKC Validation ⁴	300 mg	Passive Sampler	575-003
Methyl methacrylate	SKC Validation ⁵	150/300 mg	Sorbent Tube, 8-mm OD x 110-mm L	226-75
Styrene	SKC Validation ³	300 mg	Passive Sampler	575-003
VOCs with boiling point range: 50 - 200 C	SKC Validation ⁶	150/300 mg	Sorbent Tube, 8-mm OD x 110-mm L	226-75

¹ EC Contract MAT1-CT92-0038 "Study of Sorbing Agents for the Sampling of Volatile Compounds from Air," July 1995.

² Eriksson, K., Levin, J.O., Rhèn, M., and Lindahl, R., "Evaluation of a Diffusive Sampler for Air Sampling of Monoterpenes." *Analyst*, 119, 1994, pp. 85-88.

³ Harper, M., and Fiorito, D.L., "A Comparison of Two Diffusive Samplers for the Collection of Styrene, alpha-Methylstyrene, and o-Chlorostyrene Vapors." *Appl. Occup. Environ. Hyg.* 11 (10), October 1996, pp. 1238-1246.

⁴ Coyne, L.S., "Validation of Cyclohexanone and 2-Butanone on SKC Passive Samplers Using New Sorbents," presented at the American Industrial Hygiene Conference, New Orleans, Louisiana, May 17, 1993.

⁵ Harper, M., "A Novel Sampling Method for Methyl Methacrylate in Workplace Air," *Am. Ind. Hyg. Assoc. J.* (53), December 1992, pp. 773-775.

⁶ Harper, M., "Evaluation of Solid Sorbent Sampling Methods by Breakthrough Volume Studies," *Ann. Occup. Hyg.*, Vol 37, No. 1, 1993, pp. 65-88.

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