SIGMA-ALDRICH

RAD165 Supelco

radiello™ Cartridge Adsorbents

for sampling Aldehydes, matrix SS net with 2,4-DNPH coated FLORISIL®, pk of 20

FDS Similar Products

Conditionnement - SKU	Disponibilité	Prix (EUR)	Quantité
RAD165	Disponible pour expàdition le 31.08.18 - A PARTIR DE	624.00	0

Commandes Bulk? AJOUTER AU PANIER

Propriétés

Related Categories	*radiello*® Diffusive Sampling Products, Air Monitoring, Analytical/Chromatography, Cartridge Adsorbents, Passive/Diffusive Sampling, Plus...
packaging	**pk of 20**
matrix	**SS net with 2,4-DNPH coated FLORISIL®**
Agency/Method	**EPA TO-11A (*Note: This product is not officially specified in the method, *it may be* suitable for use for the compound(s) listed in the method*)**
	OSHA 1007 (*Note: This product is not officially specified in the method, *it may be* suitable for use for the compound(s) listed in the method*)
	OSHA 68 (*Note: This product is not officially specified in the method, *it may be* suitable for use for the compound(s) listed in the method*)
	OSHA 85 (*Note: This product is not officially specified in the method, *it may be* suitable for use for the compound(s) listed in the method*)
compatibility	**for sampling Aldehydes**

Description

General description
Several different Radiello cartridge adsorbents are available. Each of which are specific for sampling different classes of compounds. The dimensions for each cartridge are 60 mm L x 4.8 or 5.8 mm D. Each cartridge is designed for one time use with the exception of Radiello thermal desorption (TD) cartridge adsorbents.

Each cartridge arrives in a sealed glass or plastic tube wrapped in a transparent thermally sealed polyethylene (PE) bag. The same sealed tube can be used to store the cartridge after sampling prior to desorption/analysis. A sufficient number of adhesive barcode labels are included with every pack of cartridges for easy tracking of sampling date and time.

Note: To conduct air sampling using the Radiello system, Radiello diffusive bodies and triangular support plates must be ordered (separately) in addition to cartridge adsorbents. Radiello Starter Kits (RADxxx**S**) include all the necessary parts to complete a sampling.

A radiello™ diffusive sampler consists of 3 parts: the diffusive body, the adsorbent tube, and the triangular support plate. For personal air sampling, a vertical adapter can be installed. The adsorbent cartridge is removed from its glass or plastic storage tube and is inserted into the diffusive body. This is then threaded onto the triangular support plate in order to place the sampler in its sampling position.

Application
A radiello™ cartridge adsorbent packed with carbograph 4 along with PerkinElmer® tube-type adsorbent packed with Tenax® TA may be used in diffusive sampling in a study, done in order to measure the sampling rate variation of four different samplers namely GABIE, 3M 3500, PerkinElmer® TA and radiello™ 145 diffusive samplers, while being exposed to a low concentration of volatile organic compounds (VOCs) for a long duration (1-14 days).[1]

Legal Information
Florisil is a registered trademark of U.S. Silica Company

PerkinElmer is a registered trademark of PerkinElmer Inc.

Tenax is a registered trademark of Buchem B.V.

radiello is a trademark of Institi Clinici Scientifici Maugeri

Informations Sécurité

Aucune information relative à la sécurité de ce produit est actuellement disponible.

Documents

Certificat d'Analyse

Entrez le Lot N°

Devis/ Commande de produits Bulk FDS

Customers Also Viewed

RAD1234

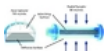
radiello™ *ready-to-use* Diffusive Sampler

for sampling Aldehydes, pk of 5

RAD1201

radiello™ Diffusive Bodies

blue, configured for sampling light sensitive compounds, pk of 20



RAD120

radiello™ Diffusive Bodies

white, configured for general use, pk of 20

RAD121

radiello™ Triangular Support Plate

pk of 20

RAD1202

radiello™ Diffusive Bodies

yellow, configured for reduced sampling rates, pk of 20

Recently Viewed

RAD147

radiello™ Cartridge Adsorbents

for sampling Phenolic Compounds (thermal desorption), matrix SS net (100 mesh, 4.8 mm diam.), Tenax-TA, pk of 20

RAD145S

radiello™ BTEX/VOC Starter Kit, Thermal Desorption

RAD145

radiello™ Cartridge Adsorbents

for sampling BTEX and VOCs (thermal desorption), matrix SS net (3 x 8 µm, 4.8 mm diam.), Carbograph, pk of 20

RAD141S

radiello™ 1,3-Butadiene Starter Kit, Thermal Desorption

pkg of 1 kit (2 RAD141 adsorbing cartridges and barcode labels, 1 RAD1202 yellow diffusive

RAD141

radiello™ Cartridge Adsorbents

pkg of 20 ea

Protocoles et articles

Articles

How Does the Diffusive Sampler Work and Why is it so Special?

The diffusive sampler is a closed box, usually cylindrical. Of its two opposite sides, one is “transparent” to gaseous molecules which cross it, and are adsorbed onto the second side. The former side...
Keywords: Adsorption, Diffusion, Diffusive sampling, Environmental, Flame ionization detector, Mass spectrometry, PAGE, Sample preparations

How to use the radiello® Diffusive Air Sampler

From our library of Articles, Sigma-Aldrich presents How to use the radiello® Diffusive Air Sampler

What is radiello® diffusive sampling?

In the mid 1990's, Dr. Vincenzo Cocheo, director of the Fondazione Salvatore Maugeri, Padova, Italy, in collaboration with the European Commission's Joint Research Center and other institutions, deve...
Keywords: Diffusion, Gas chromatography, Mass spectrometry, Sample preparations

radiello® Air Sampler Components

The essential parts of radiello are the adsorbing cartridge, the diffusive body, the supporting plate and the adhesive label with the bar code indication. Apart from the adsorbing cartridge, if not d...
Keywords: Sample preparations

radiello® Diffusive Air Sampler Calibration Solutions & Kits

RAD171 relieves you from the task of preparing the sodium sulfide standard solution for the calibration curve used for the determination of H2S by the cartridge RAD170. Since sodium sulfide is deliqu...
Keywords: High performance liquid chromatography, PAGE, Purification, Titrations

radiello® Diffusive Air Sampler Maintenance

When exposed outdoors or in a workplace environment, the diffusive body may get dirty from airborne dust. Fine particles (PM10) are especially harmful to yellow diffusive bodies since they can obstru...
Keywords: Detergents, Solvents

radiello® Diffusive Air Sampling Applications - Aldehydes

Blue diffusive body Product No. RAD1201 Supporting plate Product No. RAD121 Vertical adapter Product No. RAD122 (optional) Chemiadsorbing cartridge Product No. RAD165 Filtration kit Product No. RAD17...
Keywords: Filtration, Gene expression, High performance liquid chromatography, Ozonolysis, PAGE, Sample preparations, Spectroscopy

radiello® Passive Air Sampler Overview and Applications

From our library of Articles, Sigma-Aldrich presents radiello® Passive Air Sampler Overview and Applications
Keywords: Diffusive sampling, Sample preparations

radiello® Ready-to-Use

The ready-to-use version may be advantageous when you prefer not to assemble all of the components on field. It can be purchased as it is or in separate parts to be assembled by the customer. In the ...
Keywords: Sample preparations

Documentation référencée

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read abstract

Behavior of the GABIE, 3M 3500, PerkinElmer Tenax TA, and RADIELLO 145 diffusive samplers exposed over a long time to a low concentration of VOCs.
Benoît Oury et. al
Journal of occupational and environmental hygiene, 3(10), undefined (2006-8-16)
Diffusive sampling is particularly suited to determine time-weighted average volatile organic compound (VOC) concentration in occupational hygiene and environmental air monitoring. The purpose of this study was to measure the sampling rate variation ...Read More

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How rainfall, relative humidity and temperature influence volatile emissions from apple trees in situ.
Armelle Vallat et. al
Phytochemistry, 66(13), undefined (2005-6-14)
Headspace volatiles from apple-bearing twigs were collected in the field with a Radiello sampler during three different diurnal periods over the complete fruit growing season. Analyses by thermal desorption-GC-MS identified a total of 62 compounds in...Read More
Volatile aldehydes in libraries and archives Fenech, A., et al. Atmospheric Environment 44 (17), 2067-2073, (2010)
Evaluation of a diffusive sampler for measurement of carbonyl compounds in air Uchiyama, S., et al. Atmospheric Environment 38 (37), 6319-6326, (2004)

read abstract

[Lesser validity of urinary benzene than S-phenylmercapturic acid for measuring occupational and environmental exposure to very low concentrations of benzene].
P Lovreglio et. al
Giornale italiano di medicina del lavoro ed ergonomia, 33(2), undefined (2011-7-30)
To study the validity of urinary benzene as a biomarker of low and very low exposure to this toxicant, as compared with t,t-muconic acid (t,t-MA) and S-phenylmercapturic acid (SPMA), also taking into account the influence of cigarette smoking and co-...Read More

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Personal exposure to volatile organic compounds in the Czech Republic.
Vlasta Svecova et. al
Journal of exposure science & environmental epidemiology, 22(5), undefined (2012-6-7)
Personal exposures to volatile organic compounds (VOCs) were measured in the three industrial cities in the Czech Republic, Ostrava, Karvina and Havirov, while the city of Prague served as a control in a large-scale molecular epidemiological study id...Read More
Ambient levels and temporal trends of VOCs, including carbonyl compounds, and ozone at Caba?eros National Park border, Spain Villanueva, F., et al. Atmospheric Environment 85, 256-265, (2014)

read abstract

Biological monitoring of exposure to perchloroethylene in dry cleaning workers.
Isabella Macca et. al
La Medicina del lavoro, 103(5), undefined (2012-10-20)
Perchloroethylene (PCE) is the most widely used solvent in dry cleaning. The aim was to evaluate PCE pollution and to identify the most reliable biological indicators for the assessment of workers' exposure. The study was performed in 40 dry cleaning...Read More
Volatile organic compounds in air Marzia Mura Methods for the Determination of Hazardous Substances , 1-17, (1997)

read abstract

Occupational exposure to styrene in the fibreglass reinforced plastic industry: comparison between two different manufacturing processes.
Giovanna Tranfo et. al
La Medicina del lavoro, 103(5), undefined (2012-10-20)
Styrene is used in manufacturing fiberglass reinforced plastics: and occupational exposure was related to neurotoxicology and genotoxicity. The sum of the metabolites mandelic and phenylglyoxylic acids is the ACGIH biomarker for occupational exposure...Read More
Passive Sampling of Atmospheric Organic Contaminants Esteve-Turrillas, F.A., et al. Comprehensive Sampling and Sample Preperation 1, 201-222, (2012)

read abstract

Measurement of BTEX (benzene, toluene, ethybenzene, and xylene) levels at urban and semirural areas of Algiers City using passive air samplers.
Yacine Kerchich and Rabah Kerbachi
Journal of the Air & Waste Management Association (1995), 62(12), undefined (2013-2-1)
The study presents the levels of air pollution by aromatic organic compounds BTEX (benzene, toluene, ethylbenzene, o-, m-, and p-xylenes) in the city of Algiers. The sampling was carried out using Radiello passive sampler. Three sampling campaigns we...Read More

read abstract

Long-term phenol, cresols and BTEX monitoring in urban air.
Alberto Sturaro et. al
Environmental monitoring and assessment, 164(1-4), undefined (2009-4-4)
This paper reports the results of a long-term monitoring of benzene, toluene, ethylbenzene, xylenes (BTEX), phenol and cresols in the air of Padua during a wide period of the year 2007 using two radial passive samplers (Radiello system) equipped with...Read More

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Development of a versatile, easy and rapid atmospheric monitor for benzene, toluene, ethylbenzene and xylenes determination in air.
Francesc A Esteve-Turrillas et. al
Journal of chromatography. A, 1216(48), undefined (2009-10-27)
A new procedure for the passive sampling in air of benzene, toluene, ethylbenzene and xylene isomers (BTEX) is proposed. A low-density polyethylene layflat tube filled with a mixture of solid phases provided a high versatility tool for the sampling o...Read More

read abstract

Detection of potato brown rot and ring rot by electronic nose: from laboratory to real scale.
E Biondi et. al
Talanta, 129, undefined (2014-8-17)
A commercial electronic nose (e-nose) equipped with a metal oxide sensor array was trained to recognize volatile compounds emitted by potatoes experimentally infected with Ralstonia solanacearum or Clavibacter michiganensis subsp. sepedonicus, which ...Read More
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