

SORBENT TUBE

DNPH Active Sorbent Tube

Active Sorbent Tube for Aldehydes



DNPH Passive Sorbent Tube

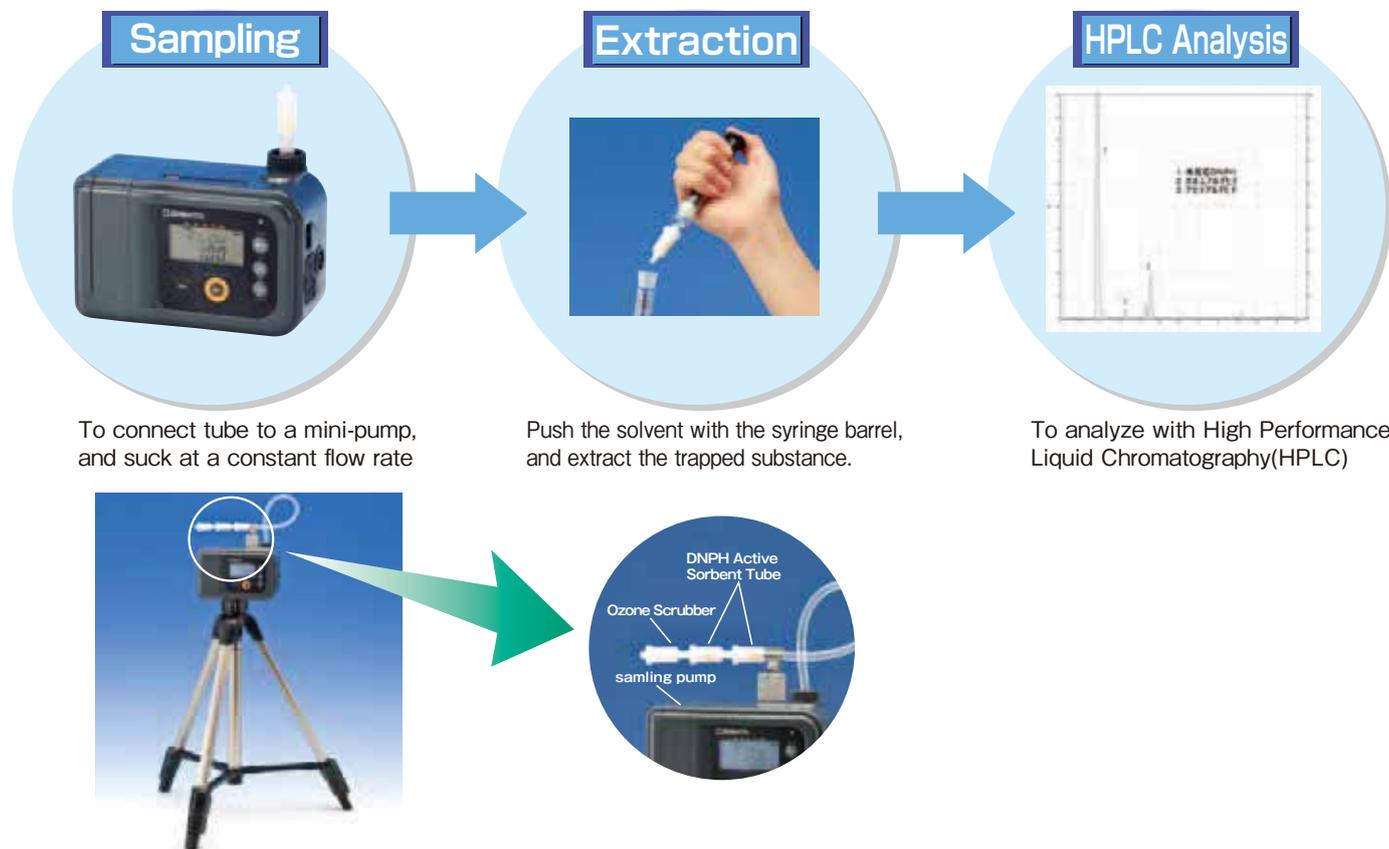
DNPH Passive Sorbent Tube for Aldehydes



DNPH Active Sorbent Tube

Active Sorbent Tube for Aldehydes

It is ideal for active sampling of aldehydes/ketones in the sorbent tube filled with - DNPH (2,4 - dinitrophenylhydrazine) impregnated silica gel. High-accuracy sampling is available, because Sibata items are so produced as to make low blank value, and the small variation by lot-to-lot, and that in the same lot as well.



To connect tube to a mini-pump, and suck at a constant flow rate

Push the solvent with the syringe barrel, and extract the trapped substance.

To analyze with High Performance Liquid Chromatography(HPLC)

Related Product [Ozone Scrubber]

Ozone scrubber is a cartridge for removing ozone in the atmosphere. You can remove the ozone by potassium iodide filled in the cartridge. The ozone will decompose the DNPH derivative. Please use it when you use the DNPH Active Sorbent Tube in an environment such as an outdoor where ozone exists.

Specifications

Name	DNPH Active Sorbent Tube	Ozone Scrubber
Trapping Substance	Aldehydes ,Ketones	—
Adsorbent	DNPH (2,4 - dinitrophenylhydrazine) impregnated silica gel (350mg) DNPH impregnated amount: about 1mg	Potassium iodide
Dimension	43mm × φ 16mm Diameter of suction extraoral: about φ 4mm and φ 6mm (two stages)	
Transportation/Storage	Refrigerated transport/Chilled storage	—
Expiration date	Within one year after production (it is shown on the bag.)	
Quantity	10pcs. per aluminum package	10pcs. included
Item code	080150-076	080150-0761

※As the items need refrigeration, shipment of the products will be refrigerated transport.

※Analysis fee is not included in our quotation.

Mini-pump MP-sigma N II series are suggested for sampling.

By selecting a suitable pump for using condition, you can sample at a stable flow rate without putting an excessive load on the pump.

Sampling flow rate	Recommended mini-pump	Item code (Main unit only)
0.1 to 0.5 (L/min)	Mini-pump, model Sigma 30N II	090860-034
0.3 to 1.5 (L/min)	Mini-pump, model Sigma 100HN II	090860-104

Low Blank Value!

Small Variation in the same lot!

Small variation by lot-to-lot!

Low Blank Value!

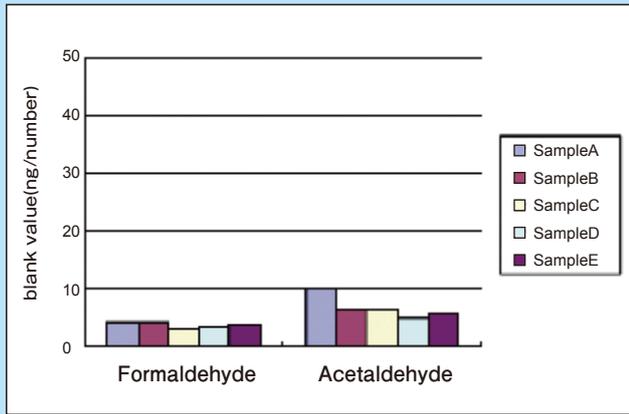
Cartridge blank value in average

Formaldehyde	0.005 (μg)
Acetaldehyde	0.008 (μg)

* The values are the results before shipment, and we do not guarantee the values.

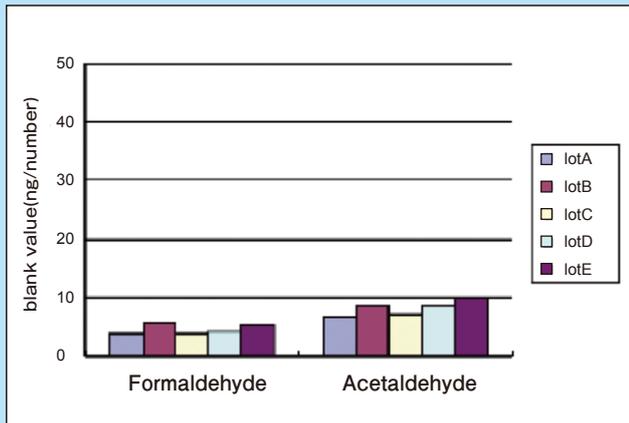
Small Variation in the same lot!

Same lot variation comparison



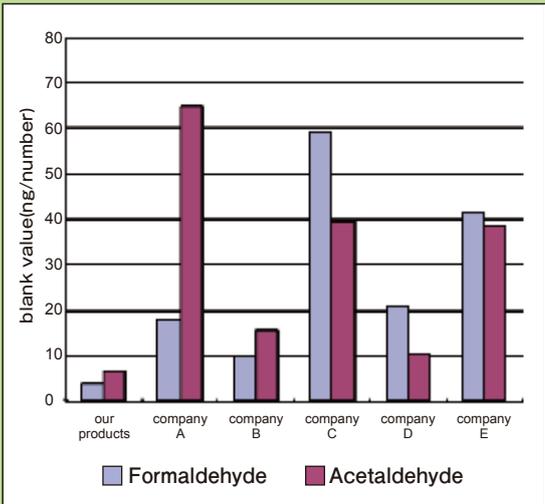
Small variation by lot-to-lot!

Blank value comparison by lot-to-lot

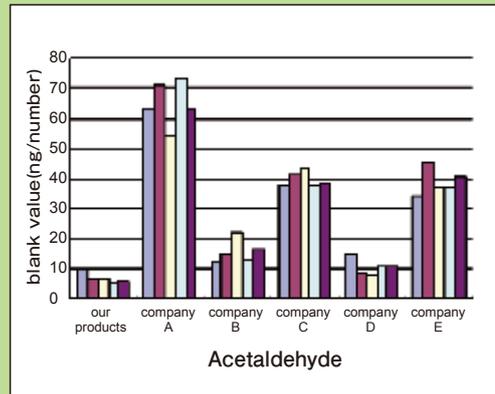
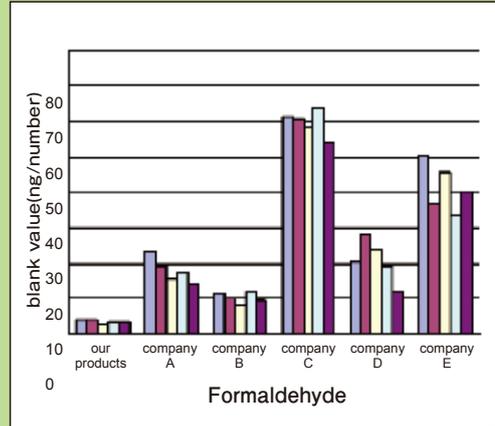


Comparison to Other manufacturers

Blank value comparison



Same lot variation comparison



DNPH Passive Sorbent Tube

DNPH Passive Sorbent Tube for Aldehydes

It is a passive sampler filled with DNPH impregnated silica gel in the diffusion tube. It is ideal for sampling formaldehyde, acetaldehyde at low blank.

You can connect the tube directly to a syringe at the time of analysis, and the structure is so designed as allows for easy operation with less extraction loss.

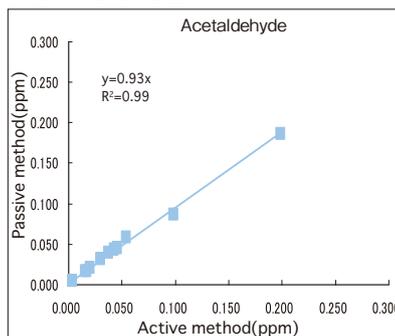
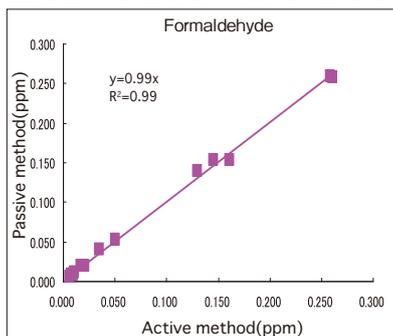


Left for 24 hours by setting the holder, after it is removed from the bag.

Push the solvent with the syringe barrel, and extract the trapped substance.

You can make injection without pretreatment with High Performance Liquid Chromatography (HPLC)

Correlation to the active method



Sampling rate

Substance	Unit : $\mu\text{g/ppm} \cdot \text{hr}$
Formaldehyde	5.1
Acetaldehyde	5.6

※ Measurement time: 8 to 24 hours

Options

Name	Item code
Holder (it is commonly used for Aldehyde, Ketones, HCHO, NO ₂)	080150-0691

※ It is the same product as current HCHO, NO₂ holder.

Specification

Name	DNPH Passive Sorbent Tube
Trapping substances	Aldehydes, Ketones
Adsorbent	DNPH (2,4 - dinitrophenylhydrazine) impregnated silica gel (200mg) DNPH impregnated amount is about 0.6mg.
Dimension	66mm × ϕ 10mm
Transportation/Storage	Refrigerated transport / Chilled storage
Expiration date	Within six months after production (it is shown on the bag.)
Quantity	10pcs. per aluminum bag
Item code	080150-075

※ As the items need refrigeration, shipment of the products will be refrigerated transport.

※ Analysis fee is not included in our quotation.

Specifications, and appearance described in this document are based on information as of March 25, 2015. They are subject to change without notice for improvement of the product.

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