ITEX-2

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Application Type
Standard Product
Application ID
Extend the headspace mode
Description
Accessory Showcase

Contents [hide]

LEAP TECHNOLOGIES

↳ leaptec.com
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ITEX-2 Option

[edit]

The **ITEX-2** Option consists of an add-on module which can be used with any existing or new CombiPAL robot. It performs enrichment of volatile or semi-volatile compounds during headspace analysis. A microtrap filled with adsorbent material, such as Tenax or activated charcoal is placed between the heated CombiPAL Headspace syringe and the syringe needle. No cryofocussing is needed to obtain sharp peaks. The ITEX-2 Option offers faster desorption, a complete deactivated sample path and a shortened syringe. Adding ITEX to your existing COMBI PAL autosampler is now as easy as switching from Liquid to Headspace Sampling.

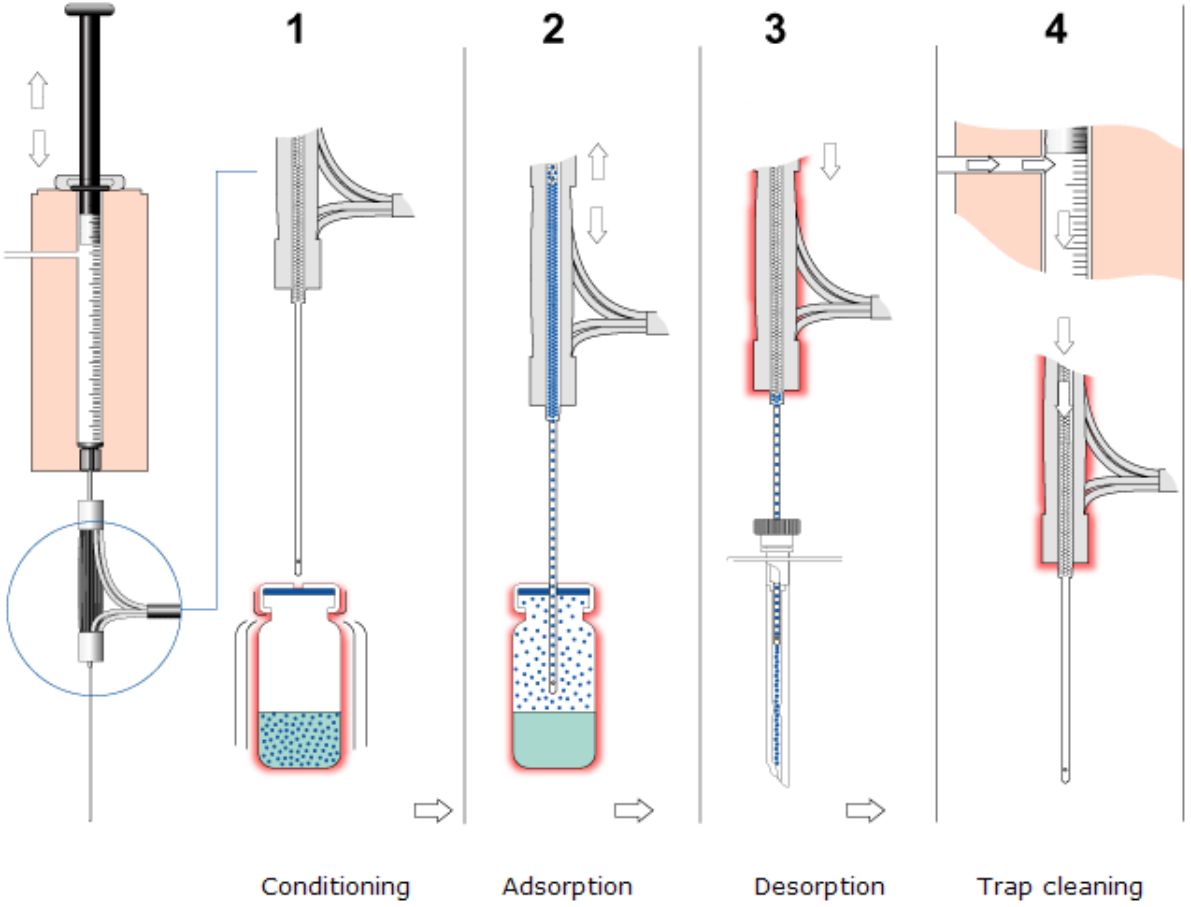
- Rapid and efficient sample enrichment of volatile and semi-volatile compounds in solid, liquid and gaseous samples
- In-tube extraction and direct thermal desorption using proven industry standard adsorbents (Tenax TA, Carbotrap, Carbosieve etc.)
- Syringe only concept for transparent sample handling, no sample loops, transfer lines, or switching valves
- Top mounted on GC's, saves valuable bench space
- No GC injector modifications, no cryo-focussing necessary
- Interfaces with any CombiPAL System, controlled by all major GC/GC-MS

Significant Markets [edit]

- Environmental
- Drinking Water
- Foods / Flavors
- Consumer Products
- Forensics / Toxicology
- Petrochemicals
- Polymers
- Pharmaceuticals
- Residual Solvents

Steps of CombiPAL ITEX Cycle [edit]

1 Sample is heated and / or agitated in a sealed sample vial until equilibrium is achieved
2 The Trap needle pierces the vial septa and the syringe pumps the headspace through the Trap
3 The loaded ITEX Trap is flash heated up to 350°C and desorbed into the hot GC Injector
4 After thermal desorption the hot ITEX Trap is cleaned with inert flush gas



Extraction Trap: 44 mg adsorbent Tenax TA 80/100 mesh
Pumping syringe: 1.3ml HD syringe with removable trap
Extraction speed: 10µl/sec. - 1000µl/sec
Extraction strokes: 1 -999
Extraction volume: 130µl - 1300 µl per stroke
Desorption temp: +5°C above ambient – 350°C selectable in 1°C steps
Desorption time: 0 - 300 sec.
Desorption speed: 1µl/s - 500µl/s
Heating-up rate: up to 12°C/s
Trap cleaning: Inert gas purging, 30 - 600 sec.
Sample capacity: up to 297 2ml standard vials up to 96 10ml or 20ml vials optional Cooled Trayholders available
Incubator oven: 6 heated positions for 2ml/10ml/20ml vials
Incubation temp: 30°C – 200°C selectable in 1°C steps
Incubation time: up to 999 min.
Agitation: Interval shaking 250rpm – 750 rpm prior sample extraction

Photos

[edit]

ITEX | ITEX Extraction Step | ITEX Desorption Step | ITEX Trap

Downloads

[edit]

ITEX

ITEX Application Binder

PRINT Function for Page

[edit]

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Accessories for the PAL

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