

# Simple Concentration and Analysis of Volatile Compounds in Socks after Wearing – Using Sorptive Media MonoTrap

A simple concentration assay of volatile compounds in socks immediately after wearing the product was carried out using MonoTrap RGC 18TD a simple concentration tool. The MonoTrap RGC18TD is packaged individually in ampoules, no pre-conditioning is required and there is no risk of contamination.

## Preliminary processing procedure

Sock

Men in their 40 s worn daily

Collection (passive)  
2 MonoTrap RGC18TD

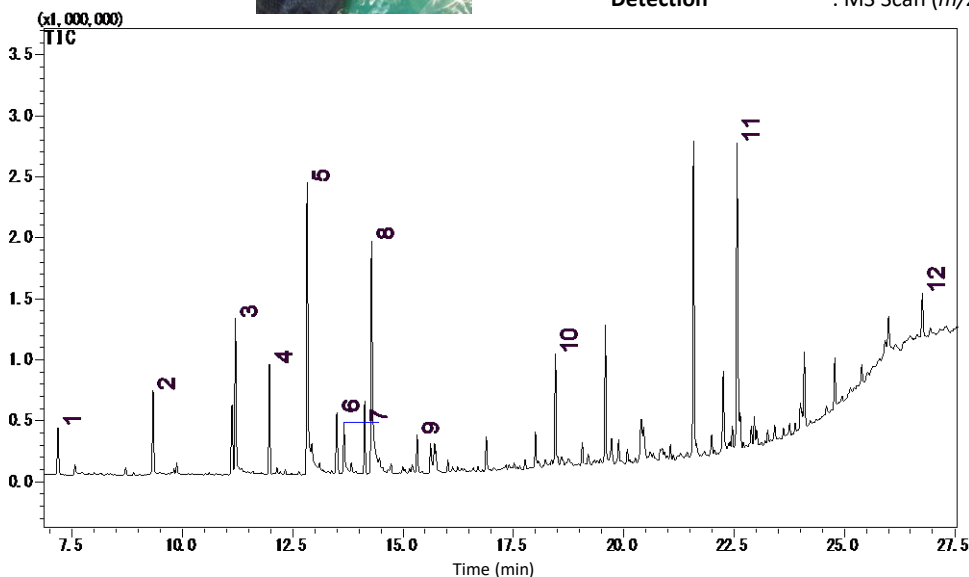
In Tedler bags 37 °C for 1 hour



TD-GC-MS

### Conditions

<b>System</b>	: GC-MS-Thermal Desorption
<b>Column</b>	: InertCap Pure-WAX 0.25 mm I.D x 30 m df = 0.25 µm
<b>Col.Temp.</b>	: 40 °C (5 min) - 10 °C/min - 250 °C
<b>Carrier Gas</b>	: He 1 mL/min (constant flow)
<b>Desorb Temp.</b>	: 200 °C
<b>Time</b>	: 5 min
<b>Flow</b>	: 2 mL/min
<b>Split</b>	: Splitless
<b>Cryo Trapping</b>	: -120 °C
<b>Injection Temp.</b>	: 250 °C
<b>Detection</b>	: MS Scan ( $m/z$ : 30 - 600)



- |                             |                                  |
|-----------------------------|----------------------------------|
| 1. Hexanal                  | 7. Dodecanal                     |
| 2. Heptanal                 | 8. Decanal                       |
| 3. Octanal                  | 9. Propylene Glycol              |
| 4. 6-Methyl-5-heptene-2-one | 10. <i>Trans</i> -Geranylacetone |
| 5. Nonanal                  | 11. Muskalactone                 |
| 6. Dichlorobenzene          | 12. Benzyl salicirate            |

\* Standard samples are not used for qualitative analysis.  
Results from a library search.

GL Sciences disclaims any and all responsibility for any injury or damage which may be caused by this data directly or indirectly. We reserve the right to amend this information or data at any time and without any prior announcement.

### GL Sciences, Inc. Japan

22-1 Nishishinjuku 6-Chome  
Shinjuku-ku, Tokyo,  
163-1130, Japan  
Phone: +81-3-5323-6620  
Fax: +81-3-5323-6621  
Email: [world@glsciences.com](mailto:world@glsciences.com)  
Web: [www.glsciences.com](http://www.glsciences.com)

### GL Sciences B.V.

De Sleutel 9  
5652 AS Eindhoven  
The Netherlands  
Phone: +31 (0)40 254 95 31  
Email: [info@glsciences.eu](mailto:info@glsciences.eu)  
Web: [www.glsciences.eu](http://www.glsciences.eu)

### GL Sciences, Inc. USA

4733 Torrance Blvd. Suite 255  
Torrance, CA 90503  
Phone: 310-265-4424  
Fax: 310-265-4425  
Email: [info@glsciencesinc.com](mailto:info@glsciencesinc.com)  
Web: [www.glsciencesinc.com](http://www.glsciencesinc.com)

### GL Sciences (ShangHai) Ltd.

Tower B, Room 2003,  
Far East International Plaza,  
NO,317 Xianxia Road,  
Changning District.  
Shanghai, China P.C. 200032  
Phone: +86 (0)21-6278-2272  
Email: [contact@glsciences.com.cn](mailto:contact@glsciences.com.cn)  
Web: [www.glsciences.com.cn](http://www.glsciences.com.cn)

### International Distributors

Visit our Website at [www.glsciences.com/distributors](http://www.glsciences.com/distributors)